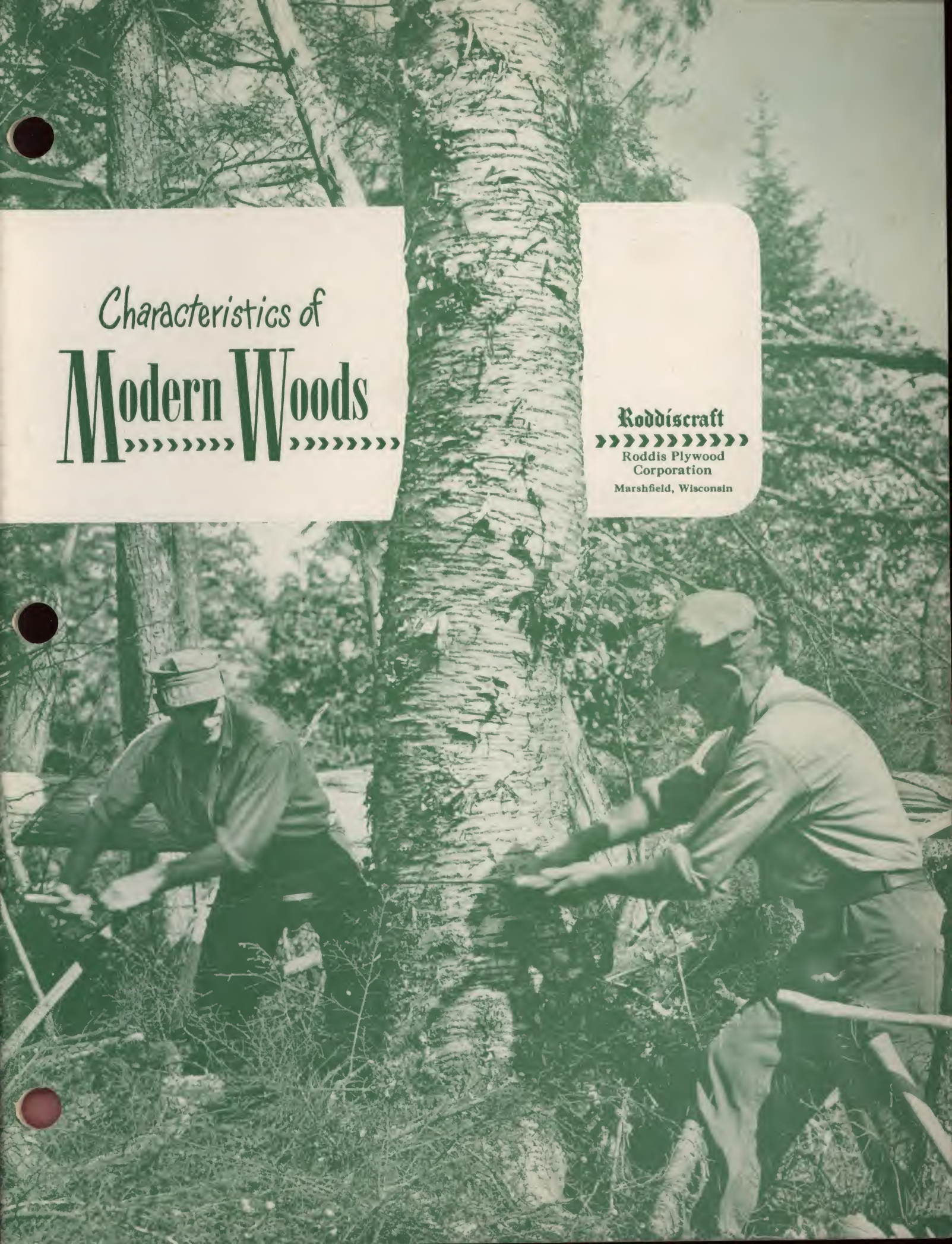


Characteristics of Modern Woods

Roddiscraft

Roddis Plywood Corporation
Marshfield, Wisconsin

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CHARACTERISTICS OF MODERN WOODS

Fourth Edition



RODDIS PLYWOOD CORPORATION
Marshfield, Wisconsin

This, the fourth edition of Characteristics of Modern Woods, is substantially the same as previous editions. It has, however, been brought up to date and contains many items not heretofore published.

The Roddis Plywood Corporation, manufacturers for over sixty years of veneered doors and plywood, and producers of northern hardwood lumber and veneers, present this book to wood users as a handy reference for general characteristics of modern woods. Representatives of this Company are located in all the principal cities of the United States, and will be glad to give more detailed information on any wood or to suggest face veneers to harmonize with the desired architectural design. Catalogs and other literature describing Roddiscraft products are available from Roddiscraft warehouses or from the home office in Marshfield.

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Marshfield, Wisconsin

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CHARACTERISTICS OF MODERN WOODS

Fourth Edition

Domestic and Foreign

Compiled from information accumulated from various wood authorities, including publications by the United States Department of Agriculture, Forest Products Laboratory, British Forest Products Research Laboratory, Wood, Malcolm H. Sherwood, Alexander L. Howard, Dr. Hans Meyer, Professor H. P. Brown, Albert J. Heidt, Thomas A. Dean and the various official lumber association booklets. Valuable technical data has been accumulated since publication of the first edition in 1937 and furnished by George N. Lamb of the Mahogany Association, Inc.

Prices shown as flitch costs of veneers are not definite quotations, but may be used in a general way to compare the values of different woods, various cuts and figures. Market conditions are constantly changing so the prices shown are merely to assist in classifying woods as of low, medium or high cost and their relative value.

All woods are listed alphabetically by trade names, followed by the botanical name and the author's name as the authority for the botanical identification.

TRADE NAME—*Botanical name,* Botanical authority.

RODDIS PLYWOOD CORPORATION

Marshfield, Wisconsin

ABACHI—See Ayous.

ABIACHE—See Opepe.

ABOUDIKROU—*Entandrophragma spp.*

Also spelled Aboudikro. Two or three different species are commercially grouped together, and sold as Omu, Gedunohor, Penkwa, Sassandra, Tiami, Sipo or Ivory Coast Sapeli. This wood from the Ivory Coast is similar in general appearance to Sapeli, somewhat darker in color, but having the same pronounced, dark, straight stripes and often shows a fine bees-wing mottle. It is harder, closer in grain, and the heartwood is a darker red-brown color than African Mahogany. It is used for fine veneer work.

ABURA—*Mitgragyne macrophylla,* Hiern.

Also known as Subaha or Bahia. From West Africa. The sapwood and the heartwood are a uniform light brown color with a pink tinge, of plain appearance and usually without any figure. A most important feature is its resistance to corrosion by acid, making it suitable for battery boxes.

ACACIA—*Acacia spp.*

See Gum Arabic and Shittimwood. Many species of Acacia grow in America, Europe and India, and most of them are not important commercially as lumber or veneers. The North American tree known as "false acacia" or "locust tree"—*Robinia pseudacacia,* Linn., produces a veneer that compares favorably with Amboyna Burl. The heartwood when cut is light greenish-yellow, but darkens to a dull greenish-brown upon exposure. Acacia Burl is the large figure in Myrtle Burl.

ACAJOU—French for Mahogany.

ACANA—See Almique.

ACAPU—See Sucupira.

ACARA—*Not indentified.*

This is a new wood from Brazil, that has the general appearance of Yuba. Special veneers can be secured with a fiddle-back figure suggestive of Yuba. This wood is probably the same as Araca.

ACCRA—*Entandrophragma, spp.*

This wood from Accra on the Gold Coast of Africa resembles Aboudikrou, a rich, dark red mahogany color. Selected logs containing small sound knots are sliced into veneers and produce a beautiful, mild, knotty effect with the natural curled grain adding to its decorative feature. It is used for fine wainscoting.

ACHI—See Agba.

ACLE—See Akle.

ACOITA-CAVALLO—See Estribeiro.

ADZA—See Moabi.

AFARA—See Limba.

AFARA, BLACK—See Ireme.

AFZELIA—See Apa.

AGBA—*Gossweilerodendron balsamiferum,* Harms.

Also called Moboron, Achi and Pink Mahogany. The name Nigerian Cedar is no longer used by the Colonial Forest Resources Development. This wood from Nigeria is a pale cedar-brown color, and bears a marked resemblance to Mahogany but is paler in color.

AGBOIN—See Ekhimi.

AGHERIBEDI—See Osol.

AGUANO—See Tropical American Mahogany.

AIELE—See Papo.

AILON—A trade name for Magnolia.

AKEDE—See Ako.

AKLE—*Albizzia Acle.*

Also known as Laurak and Acle. Akle grows in the Philippines from Northern Luzon southward to Palawan and Negros. The sapwood is a buff color and shows a sharp line of demarkation from the heartwood which is dark brown, somewhat cross-grained and occasionally wavy. It seasons well, works easily and takes a beautiful polish.

AKO—*Antiaris Africana.*

Also known as Chen Chen, Akede, Diolosso, Bark Cloth, Kyen Kyen, Eckou, and Sindrou. Most imports have been from the Gold Coast, but the tree is found from Sengal in the West to Nigeria and Cameroons in the East. The veneer is white to yellowish gray and has a good stripe. Flitch cost 1/28″ thick quarter sliced varies from 3c to 5c.

AKOMU—*Pycnanthus kombo,* Warb.

Also called Cardboard, Boxboard and Walile. From Nigeria. Both sapwood and heartwood are greyish white to a dull pink, soft, very straight, wide-grained, and coarse texture. It is used for light carpentry work and fruit boxes.

AKONDOC—See Opepe.

AKOUAPO—See Tala.

AKUME—See Bubinga.

ALBARCO—See Jequitiba.

ALBAWOOD—A trade name for White Oak.

ALDER, RED—*Alnus rubra,* Bong.

Other names, Western Alder or Alder. Grown on the Pacific Coast from Santa Barbara, California, to Sitka, Alaska. The heartwood and sapwood are about the same color, ranging from pale pinkish brown to almost white. Green lumber when exposed to the air turns reddish brown at the surface, but the discoloration dresses off in planing. The annual rings produce an obscure pattern on plain sawn surfaces, but otherwise the wood forms no ornamental figure. Red Alder is manufactured on the west coast into cores for panels, table tops, dresser and chiffonier tops, sides, drawer fronts, etc. It is also used for exposed parts of furniture in general. The fact that it seasons easily, turns and carves well, holds its shape, and stains readily in imitation of Mahogany or Walnut makes it particularly desirable for such exposed parts. In hardness and in strength as a beam or post it ranks between Red Gum and Yellow Poplar.

ALIGNA—See Apa.

ALLACEDE—*Wallaceodendron Celebicum,* Koord.

This wood is from the Philippine Islands and is botanically the same wood as Banuyo. Considerable quantities are being used in veneer form for furniture and fixture work. The background is a light reddish-brown cast, coarse grained with a darker brown broken stripe and some show of mottled figure.

ALMIQUE—*Manilkara Jaimiqui,* Dubard.

This wood is from Cuba and is also known as Acana and Donsella. It has a deep rich red color with an oily appearance and will take a beautiful polish. Main use is for inlay and turnery.

ALMON—*Shorea eximia,* Scheff.

From the Philippine Islands, this wood is always light in color, varying from light red to straw colored. Very plentiful, it is used for furniture, cases for musical instruments and fixture work. Frequently marketed as one of the Lauans. Flitch cost 1/28″ thick varies from 2c to 3c.

ALMOND—*Prunus communis,* Fritch.

From the Mediterranean basin and widely cultivated for the almond nut. The wood is a dull reddish-brown with darker veins, and is of slight commercial use in turnery and marquetry.

ALOMA—See Opepe.

ALONA—See Tigerwood.

ALPINE BURL—See Norway Birch.

ALSTONIA—See Emien.

AMARANTH—*Peltogyne paniculata,* Benth.

Also called Purpleheart, Pao (or Pau) Roxo, Bois Violet, Violetwood, Morado, Palo Morado and Amarante. A native of South America. When first cut it is a beautiful dull brown, and then almost immediately it becomes a rich purple, due, it is believed, to a form of oxidation. Close, even textured, and an almost ever present suggestion of mottle figure accentuated under finish because of the wood's excellent texture. Used almost entirely in small decorative panels, overlays, marquetry, and backgrounds for scroll work. Also frequently used for store fixtures.

AMARELLO—See Brazilian Satinwood and Arariba.

AMARELLO VINHATICO—See Vinhatico.

AMARGOSO— See Angelim Amargoso.

AMBOYNA BURL—*Pterocarpus indicus,* Willd.

East Indies. A rich brown wood streaked with red or yellow, having little twisted curls and knots. Suitable for veneers or overlay work on furniture. Available in limited quantities 1/28" thick. Flitch cost from 20c to 50c.

AMOTEAK—See Sucupira.

AMPIRA—See Ireme.

AMUGIS—*Koordersiodendron pinnatum,* Merr.

From the Philippine Islands, reddish-brown in color, very hard and heavy. Only small quantities are obtainable for general construction work and furniture.

ANAY—See Boarwood.

ANDIROBA—*Carapa guianensis,* Aubl.

From South America. Also spelled Andirova, and in Guiana is called Crabwood, Carapa and Demerara Mahogany. It has also been called Brazilian Para and British Guiana Mahogany. The wood belongs to the Mahogany family. It is used for radio cabinets, embellishments for auto bodies, models, forms, caskets, and show cases. It is hard textured with an all-over reddish-brown mahogany color, with a stripe figure when cut on the quarter.

ANGELIM AMARGOSO—*Vatairea,* Spp.

Also known as Amargosa and is found from Brazil to Venezuela. The heartwood is yellow and turns orange-brown upon exposure and the sapwood is gray. Texture very coarse, brittle and highly resistant to decay.

ANGELIM PEDRA—*Hymenolobium petraeum,* Ducke. *Andira spectabilis,* Sald.

A wood from Brazil that is pale reddish-brown with white streaks, close-grained with numerous pores. The wood is liable to be riddled with worm holes.

ANGELIQUE—*Dicorynia paraensis,* Benth.

Also spelled Angelica, and sometimes called Bastard Locust. The wood is from British, French and Dutch Guiana and is a reddish-brown color, clean and even in grain, moderately hard, tough, strong, elastic and not difficult to work.

ANGONA—See Evino.

ANGSENA—See Narra.

ANWARMA— See Erimado.

ANYARAN— See Movingui.

APA—*Afzelia Africana, spp.*

Several species are grouped together and sold as Afzelia, Aryian, Aligna and Linque. It is reported that this Nigerian wood will be made available to the trade for a utility timber almost equal to Teak and Iroko. The veneer varies from a pale yellow sapwood to a red brown heartwood.

APAYA— See Avodire.

APITONG—*Dipterocarpus grandiflorus.*

This wood from the Philippine Islands is reddish to dark red, hard, heavy, and straight grained, with coarse texture. It is used for general construction work and interior finish. Very abundant. Selected Apitong lumber from the town of Bagac in Bataan Province is sold under the copyrighted trade name of Bagac.

APOPO—See Tigerwood.

APPLE—*Pyrus malus,* L.

A native of Europe and Asia, it was cultivated from pre-historic times and charred remains of the fruit have been found in the lake dwellings in Switzerland. The wood is desired for hand saw handles as it does not split easily. A limited supply of veneer 1/28" thick cut half round is available, the flitch cost varying from 3c to 8c. Lumber 4/4 to 8/4 can be secured. Applewood in the U. S. A. is produced from the fruit tree and no large quantities are available. The wood is heavy, close-grained, and has a pleasing light reddish color.

APPLE, AFRICAN—See Mammee—Apple, African.

APRICOT, AFRICAN—See Mammee—Apple, African.

APRONO—See Mansonia.

ARACA—*Terminalia aff. januarensis*, D. C.

From Brazil. The wood has an olive-brown cast with straight, darker brown ribbon stripes, hard and heavy. Veneers and lumber are available in commercial quantities. Like most timbers of Tropical America, there is a confusion of names on this wood.

ARARIBA—*Centrolobium spp.*

This Brazilian wood cannot be classified definitely as authorities disagree. Shipments from Rio de Janeiro are called Amarella, Branca, Rosa and Vermelha while in the United States it is called Balaustre or Canarywood. The prevailing color is yellow, often variegated with red or black streaks. It is used for naval architecture and fancy woodwork. The logs run 6″ to 8″ in diameter, 8′ and longer in length. Flat cut veneers, 1/28″ thick are available, price range 3c to 5c. A small amount of 4/4 lumber can sometimes be secured in this market.

ARAUCARIA—See Chilean Pine and Parana Pine.

ARBORVITAE—See Western Red Cedar.

ARERE—See Ayous.

ARGENTO—*Eucalyptus regnans*, F. v. M.

Commercial supplies are being offered in the U. S. market, principally in veneer form sliced 1/28″ thick. The wood is one of the modern light colored veneers, a creamy white with a slight pinkish cast. In grain and texture it looks like Ayous and could be used for the same purposes. The wood is Mountain Ash.

AROMILLA—*Terminalia, spp.*

This wood from Mexico and British Honduras is also known as Nacastillo and Nargusta. It is a light colored wood with an attractive figure, but is hard to work on account of the cross grain and requires expert dry-kilning. The background is a straw-yellow color with wavy reddish-brown lines, and occasional cross-fire.

ARYIAN—See Apa.

ASH, AMERICAN—Many species of Ash grow in this country, but the three considered hereunder constitute 98% of all the Ash cut.

BLACK ASH—*Fraxinus nigra*, Marsh.

Also known as Brown Ash, Hoop Ash, Swamp Ash and Water Ash. It grows principally in the Lake states. Black Ash lumber is used for furniture construction in the exposed solid members as well as the concealed framework, because of its extreme stability and disinclination to distort. Large quantities of rotary cut veneer are used in the manufacture of high grade doors where it is known to the trade as Brown Ash. The heartwood is a warm brown color, and the thin sapwood is white. It exhibits a pronounced figure when rotary cut, consisting of ellipses and parabolas formed by the annual rings. Occasionally a rare burl is found on its roots and the figure is formed by small eyes that resemble tiny pinheads in clusters scattered across a sheet of veneer with plain wood between. Rotary cut veneer 1/20″ thick varies in cost from 2c to 4c; quarter sliced 1/28″ flitch cost in plain from 3c to 5c, and the figured from 6c to 9c; burls from 10c to 25c.

GREEN ASH—*Fraxinus pennsylvanica lanceolate* (Borkh.), Sargent.

Also known as Swamp Ash and Water Ash, but the lumber is sold as White Ash. It grows in the South Atlantic States and the Mississippi Valley.

WHITE ASH—*Fraxinus americana*, Linn.

Also known as Cane Ash. This tree grows in New England and the Middle Atlantic and Central States.

ASH, AUSTRALIAN—See Mountain Ash.

ASH, CANARY—See Mountain Ash.

ASH, EUROPEAN—*Fraxinus excelsior*, Linn.

European Ash includes English, French and Turkish grown trees. English Ash is sometimes referred to as Italian Olive Ash because of its similarity to the genuine olive wood. It is a greyish-white color with the burl veneers showing variations of wavy, curly grain. Flitch cost, 1/28″ thick, varies from the plain at 5c to 10c, and the figured at 10c to 15c; burls from 15c to 25c.

ASH, HUNGARIAN—*Fraxinus excelsior*, L.

This wood from Hungary produces beautifully figured veneers with a light tan background with brilliant, unusual marking. Flitch cost, 1/28″ thick, varies in the plain veneer from 4c to 6c, and in the figured from 7c to 25c.

ASH, MOUNTAIN—*Eucalyptus regnans,* F. v. M.

Also known as Canary Ash and Australian Ash. This tree from Australia and Tasmania produces some very fine veneers used for panels, furniture, and fixture work. The wood is very light in color, the background being a creamy white with irregular light brownish wide streaks and a cross-fire similar to English Harewood. Flitch cost, 1/28″ thick, varies from 4c to 6c.

ASH, JAPANESE—See Tamo.

ASH, OLIVE—See European Ash.

ASH, SILVER—See Cudgerie.

ASPEN—*Populus alba,* Linnaeus.

The Aspen cut into veneers is not the same as the Aspen logs described under Popple. It is the silver or white poplar of Europe and Asia which has been planted a great deal in the United States, principally Pennsylvania, Delaware and Maryland. The wood is soft and light, very close grained, with a natural sheen; its sapwood a velvety white with heartwood of light tan, sometimes streaked in brown. Sliced flitches, 1/28″ thick in plain to medium figure, cost from 10c to 15c, and highly figured from 18c to 25c. Finely feathered crotches are very rare, and all Aspen veneer is becoming increasingly scarce.

ASPEN, NORTHERN—See Populus and Popple.

ASSIA—See Ozigo.

ASTA—*Not identified.*

This Mexican wood is a creamy to lemon colored wood of fine grain, strong, hard, durable and straight splitting. It is used for all the purposes of Hickory for ladder rungs, tool handles, fishing poles, archery bows, etc. This wood may be Lancewood.

ATALA—See Tala.

AVOCADO—*Persea americano,* Mill.

Also known as Allegator Pear. A native of the Antilles but cultivated in all tropical countries. The wood is a handsome cabinet wood, light reddish-brown in color, fine textured and easy to work. The tree grows 30 to 40 feet high and 12 to 18 inches in diameter.

AVODIRE—*Turraeanthus africana,* Pell.

An African wood from the French Ivory Coast, and the Gold Coast where it is called Apaya. The color varies from dull paper white to a beautiful light, golden cream shade, strongly figured, and of fine texture. Quarter sliced 1/28″ thick, the flitch cost varies from plain to medium striped at 3c to 6c, with highly figured stock at 6c to 10c. Small quantities of solid 4/4 and 5/4 lumber are available. Crotches, when available, vary from a moon effect to strong feather designs; flitch cost 10c to 30c.

AYAN—See Movingui.

AYOUS—*Triplochiton scleroxylon,* K. Schum.

Also known as African Whitewood, Arere, Obeche, Okpo, Abachi, Wawa, Eginfifen, Ewowo, Owowa, and Samba. It is exported from West Africa, principally from Nigeria and the Gold Coast, with some logs from the French Cameroons and the Ivory Coast. It is a clean, creamy white wood which weathers to a light-brownish-yellow color, with a fairly open, uniform grain. Flitch cost 1/28″ quarter sliced varies on plain to medium stripe from 3c to 5c.

AZOBE—See Ekki.

BABUL—See Gum Arabic.

BACONA—See Carabali.

BADI—See Opepe.

BAGAC—A copyrighted trade name for selected apitong lumber.

BAGTIKAN—*Parashorea malaanonan,* Merr.

Also spelled Bagtican. From the Philippine Islands. Pale white to light red, sometimes with a slight brownish tinge. This wood is hard, heavy, coarse textured with grain exhibiting a stripe figure when quartered. The supply is plentiful for furniture and cabinet work. It is sometimes marketed as one of the white lauans.

BAHIA—See Abura.

BAHIA WOOD—See Brazilwood.

BAKU—See Makore.

BALATA—See Bulletwood.

BALAUSTRE—See Arariba.

BALM-OF-GILEAD—See Balsam Poplar.

BALSA—*Ochroma spp.*
This wood, also known as Corkwood, comes from the West Indies and from Southern Mexico, down both coasts of South America. It grows rapidly, attaining a height of sixty-five feet by the time it is five years old. The wood is pale pinkish-white in color, soft, light and porous, and weighs but seven and a half pounds per cubic foot when oven dry. It can be used for core-stock where light weight panels are essential.

BALSAM—See Balsam Poplar.

BALSAMITO—See Cabreuva.

BALSAMO—*Dalbergia spp.*
Known as the rosewood of Mexico. It is somewhat lighter in color than East Indian Rosewood, has a pleasant odor, and produces beautiful veneers. The main color is pink to a purplish red with darker, wavy, streaming lines of red which shade off into almost black. Texture dense, hard, fine grained and strong. Available in solid lumber and veneers.

BAMBOO—*Bambusa, spp.*
Used largely for fishing poles. It is a native of China and Formosa.

BANABA—*Lagerstroemia speciosa,* Pers.
This wood from the Philippines is ashy rose to reddish brown, hard, heavy, strong and durable. It is used for furniture and cabinet work when available.

BANAK—See Virola.

BANGKIRAI—A term used to designate certain species of *Hopea* and *Shorea* from India with an air-dried weight of not less than 47½ pounds per cubic foot.

BANUYO—*Wallaceodendron celebicum,* Koord.
From the Philippines. This wood is a light brown to dark brown in color, hard and heavy. It is straight or slightly cross grained and fine textured but works easily, especially for carving. Small quantities obtainable for paneling and gun stocks.

BARI—See Santa Maria.

BARILLO—See Boarwood.

BARK CLOTH or BARCLOTH—See Ako.

BARWOOD—See Padauk.

BASSWOOD—*Tilia americana,* L.
Also called Linden and in Europe, Limewood. Common in the United States and Canada, with fine textured stock found in Wisconsin, Michigan and the Appalachian hardwood producing region. The wood is light in weight, white, soft and easy to work with an even texture and straight grain and is recognized for its ability to take enamel finishes. It is one of the finer core materials as it glues easily and forms a flat base for the crossbandings and face veneers.

BATAAN—Tanguile grown in the province of Bataan is sometimes called Bataan or Bataan Mahogany.

BATETE—*Kingiodendren alternifolium,* Merr.
This wood from the Philippines is reddish brown, turning to very dark brown with age or upon exposure. moderately fine textured and cross grained. Obtainable in fairly large quantities, it is used for interior work and furniture.

BATIKULING—*Litsea spp.*
This wood from the Philippine Islands is pale yellow to reddish or greenish yellow, soft and light, fine textured and straight grain, with a faint cedary odor. Used for furniture and cabinet work and carved articles. Not plentiful.

BATITINAN—*Lagerstroemia piriformis,* Koehne.
From the Philippines. Greenish grey to dark brown wood, hard and heavy, ring-porous with grain generally straight but sometimes wavy. It is sometimes called Philippine Teak. Used for furniture and cabinet work when available.

BATOA—See West Indian Boxwood.

BAUMIER—See Balsam Poplar.

BAYOTT—See Palosapis.

BAYTREE—See Myrtle Burl and Laurel.

BAYTREE, SWEET—See Laurel.

BAYWOOD—A name used in England for the pale soft Mahogany from the low lands of the Bay of Belize, British Honduras. See Tropical American Mahogany.

BEANWOOD—See Australian Blackbean.

BEDARU—See Daru.

BEECH, AMERICAN—*Fagus grandifolia,* Ehrh.

The principal commercial growth of this tree is in Wisconsin, Michigan, and the Appalachian hardwood producing region and the southern states. It is a hard, stiff, strong, durable hardwood with fairly straight grain. Its heartwood is of a reddish-brown color. The sapwood is white. It is used principally for flooring.

BEECH, BLUE—See Hornbeam.

BEECH, CHILEAN—See Southland Beech.

BEECH, EUROPEAN—*Fagus sylvatica,* Linn.

Similar to American Beech, but in the furniture trade in the U. S. A. it is considered a much better cabinet wood than the native species. Veneers are available, 1/28″ sliced varying in flitch cost from 3c to 5c. Lumber 4/4 to 12/4 can be secured.

BEECH, EVERGREEN—See Tasmanian Myrtle.

BEECH, RED—See Australian Maple.

BEECH, SOUTHLAND—*Nothofagus menziesi,* Oerst.

Also called Chilean Oak, Chilean Beech, Rauli, Melica, and incorrectly named Roble. The tree grows in New Zealand, Argentina, Tasmania and Australia. The wood is a reddish-brown color with a firm close grain, hard and finishes well.

BEECH, SHE—See Brown Bollywood.

BEECH, TASMANIAN—See Tasmanian Myrtle.

BEEFWOOD—See Bulletwood.

BEJUCO BLANCO—*Trichilia isthmensis,* Stand.

A Mexican wood somewhat similar in color to Birch, but easier to work and when cut on the quarter shows a beautiful wavy figure. The two woods are very similar, with the Bejuco Blanco a lighter shade.

BEJUCO COLORADO—*Guarea excelsa,* H. B. K.

BELLA ROSA—See Palosapis.

BENIN—See Tigerwood.

BERA—See Lignum Vitae.

BETHABARA—*Tabebuia Serratifolia,* Vahl.

This wood is found in the Guianas, Venezuela, Trinidad, Columbia and as far south as Brazil. The heartwood is olive-brown to blackish and rather oily looking. The wood is extremely hard, heavy, tough, is difficult to work but takes a very smooth finish and is highly durable.

BIBOLO—See Tigerwood.

BIDOU—See Tala.

BILINGA—*Sarcocephalus trillesi,* Pierre.

From the West Coast of Africa. The background is a reddish-tan color, with reddish-brown diagonal strips and a nice cross-fire. Good quantities of veneer are available.

BILLYWEBB—*Sweetia panamensis*, Benth.

Also called Chichipate. From British Honduras and Mexico. A beautiful wood with a close compact grain similar to West Indian Mahogany. The color is brown with lighter and darker shades, lustrous but difficult to finish. Heavy with a roey grain.

BILSTED—See Red Gum.

BIMINI—See Landa.

BINGGAS—*Terminalia comintana*, Merr.

From the Philippine Islands. Greyish to brownish with dark purplish brown streaks, hard, heavy, straight grained with fine texture. Works well for furniture and cabinet work when available.

BIRCH, ALASKA WHITE—*Betula neoalaskana*, Sargent.

This Alaskan wood grows from the Saskatchewan Valley to the Yukon River Valley. It is also known as Alaska Birch, White Birch and Yellow Birch but it should not be confused with Paper Birch—*Betula papyrifera*, or Yellow Birch—*Betula lutea*. Alaska White Birch has so far been used locally for fuel, etc., but since it is similar in structure to other birches it should be adaptable to any of the same uses. Industrial production has not yet been developed.

BIRCH, AMERICAN—Commercial Birch comes from two of the ten American species.

SWEET BIRCH—*Betula lenta*, Linn.

Sweet Birch is also known as Cherry Birch, Black Birch and Mahogany Birch. It occurs from Newfoundland westward to Eastern Iowa, and southward to Northern Florida. The stands of commercial importance are principally in the east, from New York state southward along the Appalachian Mountains.

YELLOW BIRCH—*Betula lutea*, Michx. f.

Yellow Birch is also known as Gray Birch, Silver Birch, and Swamp Birch. It grows within an area that extends from Newfoundland westward to Northern Minnesota, and southward along the Appalachians as far as Asheville, North Carolina. It is most abundant in Northern Wisconsin and Michigan, New England and New York. When sold as lumber the selected heartwood of both species is frequently sold as Red Birch, and the sapwood as Sap Birch. When cut for veneers the heartwood of both species is usually sold as Red Birch, and the sapwood as White Birch. Rotary cut or plain sawn Birch exhibits a mild pattern formed by the annual rings. In some logs the annual rings follow numerous small depressions and elevations, giving the veneer an undulating figure usually referred to as Curly Birch. Natural Birch face veneers are graded for quality, but are unselected for uniformity of color, either or both Red and White Birch may appear in the same face. Birch is one of the most important hardwoods of the world because of its beauty, strength, even texture, and the large sizes available. It is desirable for tops and panels of furniture, exterior and interior doors, store fixtures, airplane panels, and many other important uses.

BIRCH, FLAMY—See Norway Birch Burl.

BIRCH, NORWAY BURL—*Betula alba*, Linn.

Also called Alpine Burl or Karelian Burl. It is secured from the forests of Norway, Sweden and Finland, and somewhat resembles Birdseye Maple with hard eddy-like swirls in a light tan surface covered with tiny V shaped figures. Some logs yield rotary cut veneers which show fiddle-back, curly or flamy figure and are in demand for decorative plywood. The special veneers are often sold as Flamy Birch, etc. Standard veneer is 1/28″ thick.

BIRNUT—A misleading name for Birch with a nutwood finish.

BITTERWOOD—See Macaya and Marupa.

BLACK BEAN, AUSTRALIAN—*Castanospermum australe*, A. Cunn.

Also called Beanwood and Moreton Bay Chestnut. This Australian wood is close grained with a texture like Chestnut. It has a light to dark brown background broken by streaks of lighter shades, is fairly hard and heavy, and closely resembles Teak. Flitch cost, 1/28″ thick, varies in the plain from 6c to 10c, and the highly figured from 12c to 18c.

BLACKTHORN, IRISH—*Prunus spinosa*, L.

Although the Irish Blackthorn is of world wide fame, the wood has never been considered for use outside of Ireland. It has a rich brown heartwood, close grained and takes a smooth finish. It has great strength.

BLACKWOOD, AFRICAN—*Dalbergia melanoxylon*, Guill. & Perr.

Also called Mozambique Ebony and Congowood. This African wood is hard, close textured, and dark purple or plum colored.

BLACKWOOD, AUSTRALIAN—*Acacia melanoxylon*, R. Br.

Australia, including Tasmania, produces this wood, deep, rich, reddish-brown in color, close grained, and very often showing a pretty figure and mottle.

BLANCO—See Prima Vera.

BLEEDING HEART—See Macawood.

BLOODWOOD—*Eucalyptus corymbosa*, Sm. Australia.
Pterocarpus spp. Central America.

Both of these species are sold as Bloodwood and are very similar in appearance. The wood is dark red with a hard, very coarse texture. In Australia it is used for telegraph poles, keels of vessels, piles, etc., because it is durable in the ground. Some choice logs are cut into veneers and produce an excellent and beautiful appearance.

BOARWOOD—*Symphonia Globulifera.*

Also known as Hog Gum, Doctor Gum, Waika Chewstick, Barillo, Sambogum, Buck Wax Tree and Anay. This wood is from the West Indies, British Honduras, Guatemala and northern South America. The sapwood is yellowish brown and the heartwood is yellow to greenish brown. Suitable for commercial grade veneer and lumber but not for face veneer.

BODI—*Pynaertia occidentalis*, Chev.

Also spelled Bodia. This wood from Africa is hard textured, of a yellowish-brown color exhibiting a fine rope and broken stripe figure.

BOISE DE ROSE—See Tulipwood.

BOIS SAVANNE—See Carabali.

BOIS VIOLET—See Amaranth.

BOKUKA—See Emien.

BOLILLO—See Carabali.

BOLLYWOOD, BROWN—*Litsea reticulata*, Bth.

This wood from Australia is also known as Bolly Gum and She-Beech and has incorrectly been called Cudgerie. The color is a pale brown and the wood has a firm and rather wooly straight grain. It is used for boat building, cabinet work and plywood.

BOMBE, WHITE—*Terminalia procera*, Roxb.

This wood from India, Burma and the Andaman Islands is a light brown nut color, with slight, dark streaks and is easy to work yielding a smooth surface from the plane.

BONGO—See Olon.

BONGOSI BOLE—See Ekki.

BONKANGU—See Opepe.

BONKESE—See Opepe.

BOSSE—*Guarea cedrata*, Pellegr. *Guarea thompsoni*, Sp. et Hutch.

This wood from the Gold Coast, Nigeria and the Ivory Coast is known by many different names and the wood varies greatly in color and figure. The more frequently used names are Guarea, Obobo, Obobonekhui, Pequa, African Cedar, Cedar Mahogany, Cedron, and the very light wood is sold as Nigerian Pearwood. The sapwood is pinkish-white and the heartwood varies from a delicate pale pink to a light mahogany color with a veined or curly appearance, fine grained and possesses a strong cedar-like scent when freshly sawn. Some veneers show a wide broken stripe with the color ranging from pale pink to deep brown. It is used for furniture, flooring, wainscoting and veneered doors, and produces excellent decorative effects. Flitch cost, 1/28″ thick in plain veneer, varies from 3c to 5c, with figured wood from 6c to 8c. Bosse crotches vary from 6c to 15c.

BOUKAU—French for Birch.

BOXBOARD—See Akomu.

BOX ELDER—*Acer negundo*, L.

The "ash-leaved Maple". The wood is light, soft and not strong, close grained and creamy white. A native of the U. S. A. It is widely planted as a shade tree, of rapid growth but the wood is of little commercial value.

BOXWOOD, INDIAN—*Buxus sempervivens*, Linn.

This is the original and genuine Boxwood of Europe and Asia. The wood is a whitish-yellow color, hard with close grain. The high cost of extraction and freight have practically prohibited any further export.

BOXWOOD, MARACAIBO—See West Indian Boxwood.

BOXWOOD, WEST INDIAN—*Casearia praecox*, Gris.

This wood from the West Indies, Venezuela, and Colombia is also known as Maracaibo Boxwood, Batoa or Zapatero. The wood is yellowish-white and rather bright, dark, dense and grainless. It is used in marquetry, and for the jewelry and instrument trade. roller skate wheels and mallets. An occasional log from Venezuela or Santo Domingo with a crotch is sawed into veneers, which have the color of Maple but are harder in texture. Veneers from Boxwood crotches are used for furniture inlays.

BRANCA—See Arariba.

BRAZIL NUT—*Bertholletia excelsa,* H. B. K.

This Brazilian wood is also known as Castanheira and has characteristics suitable for cabinet work. Its Walnut-like appearance suggests many uses where one of the Walnut species is ordinarily called for.

BRAZILWOOD—*Caesalpinia echinata,* Lam.

This wood from Brazil is also known as Brazilletto, Pernambuco, Pau Brazil and Bahia wood. The wood is a rich bright-red color and shows fine, snake-like ripple marks. The best pieces are selected for violin bows as this wood produces the peculiarly strong resilient spring required for fine bows. It also is used as a dye wood.

BREADNUT—See Capomo.

BRIAR ROOT—*Erica arborea,* L.

Universally known because of the familiar pipe but not as commonly supposed, the Rose Briar. Originally produced in South France, but now largely from West Africa. There is nothing comparable for tobacco pipes.

BRIMSTONE—See Opepe.

BROWNHEART—See Sucupira.

BUBINGA—*Didelotia africana,* Pierre. *Copaifera, spp. Brachystegia, spp.*

Also called African Rosewood, Okwen and Akume. This wood from West Africa is hard and heavy with dark purple lines evenly spaced on a light violet background suggestive of Rosewood of which it is a relative. Quarter sliced 1/28″ thick, it is well figured with flitch costs ranging from 3c to 10c. Lumber 4/4 to 8/4 is available in limited quantities.

BUCKEYE—*Aesculus glabra,* Willd.

Also called Ohio Buckeye, a native of the eastern U. S. The wood is light, soft, close-grained and not very strong. It is used by the makers of artificial limbs. The Horse Chestnut,*Aesculus hippocastanum,* L. is from the mountains of Greece.

BUCK WAX TREE—See Boarwood.

BULLETWOOD—*Mimusops globosa,* Gaertn. Also *Manilkara, spp.*

The name covers many species, and is consequently known by many names—Massaranduba, Wild Dilly, South American Mahogany, Beefwood, Horseflesh Wood, Red Lancewood, Balata, etc. It comes from Brazil, the Guianas and Venezuela, and is a hard, heavy wood with fine texture and straight grain, reddish-brown in color with a purplish cast. Limited quantities of 4/4 lumber can be secured.

BUNYA BUNYA—See Bunya Pine.

BURUTA—See Ceylon Satinwood.

BUTTERNUT—*Juglans cinerea,* Linn.

Sometimes called White Walnut. In the United States it follows the Appalachians south and the more elevated sections of those states lying along the west bank of the Mississippi with varying quantities scattered throughout the north central states. It is a pale brown, satiny wood, soft textured and resembles the grain of American Walnut but is lighter in color and does not present as hard a surface. The veneer can be rotary cut or sliced, and is generally 1/20″ thick, ranging in price from 2c to 6c.

BUTTER TREE—*Bassia latifolia,* Roxb.

Hardwood. India. Also called Mahwa. Reddish color, close even grain, very hard and heavy. Medullary rays distinct. Used for general purposes, furniture, etc.

BUTTONWOOD—See White Mangrove and American Sycamore.

CABBAGE BARK—See Macaya.

CABIUNA—See Brazilian Rosewood.

CABREUVA—*Myrocarpus frondosus,* Fr. Allem. *Myroxylon toluiferum,* H. B. K.

A wide range of names has been given to this South American hardwood, and authorities do not agree on the identification. The name Balsamo has been used for Cabreuva and also for the wood described under Balsamo. Other names are Oleo Vermelho, Balsamito, Quina, Oleo Pardo, and others. The heartwood varies from yellow to dark brown or a very bright red with dark streaks, lustrous, fragrant, hard, heavy, strong and durable. The grain is roey and fairly difficult to work but it is sometimes used as a substitute for Cuban Mahogany.

CALAMANDER—See Calamander Ebony.

CALAMANSANAY—*Nauclea spp.*

A hardwood from the Philippines, yellowish red to rose color with varied markings, lustrous with fine texture. Used for structural work and furniture.

CALANTAS—See Kalantas.

CALICO ASH.

This is a trade name, incorrectly used for veneer from American Elm.

CAMAGON—*Diospyros discolor*, Willd.

From the Philippine Islands, but not plentiful. The sapwood is tough and flexible, with the heartwood brittle. The heartwood is black with yellow, brownish or ashy streaks. It is difficult to season and hard to work.

CAMBALA—See Iroko.

CAMPHORWOOD, BORNEO—*Dryobalanops aromatica*, Gaert.

From Borneo and Sumatra, and called Kapur Barus by the natives. The wood is a dull, light, reddish-brown color with gummy pores and an aromatic scent. After exposure the wood darkens to somewhat the color of Teak. It is used for flooring and general construction work.

CAMPHORWOOD—*Cinnamomum camphora*, Nees et Eberm.

This wood from China, Formosa, Japan and Borneo is a light yellow brown color with dark and light streaks, fairly hard texture. There is very little demand and it is hard to secure. A very good cabinet wood but should not be confused with Cinnamon which is a poor cabinet wood. East Africa produces a Camphorwood, *Ocotea usambarensis*, Engl. that is known as Muzaiti or Kenya Camphor. The wood is pale yellow seasoning to deep brown. Moderately hard and strong with even texture and interlocked grain. Not very difficult to work, and polishes fairly well. Similar to light colored West African Mahogany, but fragrant and contains gum secretions.

CAMWOOD—See Padauk.

CANADIAN SILKYWOOD—*Betula lutea*, Michx.f.

This wood is Yellow Birch, characterized by wavy or curly grain and the specie grows in the eastern Canadian Provinces. The sapwood is white or light yellow and the heartwood varies from reddish-brown to red. Veneers for fine paneling and furniture are generally cut from the heartwood and the wavy and curly grain produces unique and beautiful figuring with pleasing color combinations and cross-ripples.

CANA FISTOLA—*Cassia grandis*, Lam.

This hardwood is generally called Horse Cassia or Stinking Toes. Tropical America. Reddish with darker streaks. Hard, heavy, durable, lustrous finish, gum deposit. Irregular grain. Polishes well.

CANALETTA—*Cordia gerascanthus*, Linn. *Cordia dodecandra*, D. C.

Also spelled Canalete, and called Cyp, Cypre, Princewood, Solera, and Ziricote. A hard, dense wood from Tropical America, with black streaks having a metallic lustre. The wood from Venezuela is a purplish-lilac color while the British Honduras wood is dark olive to sepia brown, all with attractive black streaks. Flat cut or half-round veneers, 1/28″ in flitch form, cost from 3c to 12c. Lumber 4/4 to 12/4 is available in small quantities.

CANARIUM—See Papo.

CANARYWOOD—See Arariba.

CANCHARANA—*Cabralea cangerana*, Sald.

Also called Cangerana. This Brazilian wood resembles Cedar with heartwood, a bright red mahogany color and the sapwood bluish-red, with light and dark markings. Straight and wavy grain medium texture, smooth and fragrant. It is used for furniture and general carpentry.

CANGERANA—See Cancharana.

CAOBA—See Tropical American Mahogany. Spanish for Mahogany.

CAPA—See Fiddlewood.

CAPOMO—*Brosimum alicastrum*, Swartz.

This Central American wood is also called Laredo, Capome, Ujusti, Ogechi, Ojoche, Ramon and Breadnut. It resembles Hard Maple in weight and grain except it does not produce the birdseye grain. The wood is a pale yellowish-tan color with a beautiful cross-ripple, lustrous, hard and suitable for modern light-colored furniture, panels, doors or any decorative work. Logs have been imported in good commercial quantities and lumber or veneer is available. Veneers, 1/28″ thick range in price, flat sliced or plain quartered from 2½c to 4c with highly figured flitches varying from 5c to 10c a square foot. Lumber can be sawn to order.

CARABALI—*Albizzia Caribaea.*

This wood is a native of Venezuela and is also known as Bacona, Bois Savanne, Bolillo and Gavilina. It is associated with Cedro and Possum wood. The heartwood is pale yellow and the sapwood is a cream color.

CARACOLI—*Anacardium rhinocarpus,* D. C.

This South American wood is appearing in the market in limited quantities and is known as Carocoli, Espave, Giant Cashew tree and other names. It is a light nut-brown color with fairly smooth grain, but little is known of its durability or working qualities.

CARALLIA—*Carallia integerrima,* D. C.

From India and the East Indies. The wood is a pale reddish-brown color, moderately hard, heavy, durable, and rather brittle. It has straight grain with large rays and has a prominent figure when quarter sawn. It is used for construction work, furniture and wainscoting panels.

CARAPA—See Andiroba.

CARDBOARD—See Akomu.

CARETTA—The original wood came from Venezuela but is now discontinued.

CAROBA—*Jacaranda copaia* (Aubl.), D. Don.

Also known as Fotui. From Central and South America. The wood is the color of oatmeal to a dingy white, lustrous and somewhat satiny, light, soft but firm, straight grain with uniform, medium texture.

CARPATHIAN ELM—See Elm.

CASHEW NUT—*Anacardium occidentale,* L

A small West Indian tree cultivated for its nuts. The wood is lustrous, greyish, pinkish or brownish color. Moderately hard and strong, easy to work, but is not resistant to decay. The wood is used locally for general carpentry.

CASTANHEIRA—See Brazil Nut.

CATALPA—*Catalpa bignonioides,* Walt.

A native of Southern United States but is cultivated in some northern states for shade trees. The larger and more hardy trees grow from Indiana to Tennessee and west through Arkansas, Missouri, Kansas and Oklahoma. Other species are known in China, Japan and Haiti. The wood is light and fine and used somewhat in cabinet work.

CATIVO—*Prioria copaifera,* Griseb.

Also known as Florisa and Tabasara. This wood from Tropical America is straight grained, tools easily, and is moderately strong. The heartwood is brown, while the thick sapwood is a dingy white color. Sliced veneers 1/28" thick are available, the flitch cost varying from 1½c to 4c. Solid lumber 4/4 to 8/4 can be secured.

CATMON—*Dillenia philippinensis,* Rolfe.

Hardwood. Philippine Islands. Light to dark reddish brown. Hard, heavy, dense and durable. Curly, flake grain and coarse. Fairly difficult to work. Used for veneers.

CEDAR, AFRICAN—See Bosse.

CEDAR, ALASKA—*Chamaecyparis nootkatensis* (Lambert), Sudworth.

It grows in the Pacific Coast region of North America from southwestern Alaska to northern Oregon. The heartwood is a bright clear yellow, and the thin sapwood is a shade lighter. Also known as Yellow Cedar, Sitka Cypress, Yellow Cypress, Nootka Cypress, Alaska Cypress, and Alaska Yellow Cedar.

CEDAR, AROMATIC RED—*Juniperus virginiana,* Linn.

As a shrup it is called the Juniper bush or Savin. As lumber or veneer it is known as Eastern Red Cedar, Red Cedar, Southern Red Cedar, Pencil Cedar or Tennessee Red Cedar. It grows from Nova Scotio west to the Dakotas and from that line south to the Gulf and in South America. The wood is light pink, brittle, and is generally more desirable when full of knots. The aroma from the cedar oil in the wood, it is claimed, will kill the larvae of the moth. The solid lumber is generally used but sawn veneer can be specified for plywood.

CEDAR, BORNEO—See Seraya.

CEDAR, BRAZILIAN—See Spanish Cedar.

CEDAR, CENTRAL AMERICAN—See Spanish Cedar.

CEDAR, EAST INDIAN—See Seraya.

CEDAR, EASTERN RED—See Aromatic Red Cedar.

CEDAR, HONDURAS—See Spanish Cedar.

CEDAR, LEBANON—*Cedrus libani*, Loud.

From Europe, Asia and Africa. Several species are often grouped under the name of Lebanon Cedar. This evergreen tree produces a wood that is yellowish-brown when first cut but gradually darkens with exposure to a rich lustrous brown with darker brown prominent ring markings. It is used for exterior construction work, garden furniture and fencing.

CEDAR, MEXICAN—See Spanish Cedar.

CEDAR, NIGERIAN—See Agba.

CEDAR, PENCIL—See Aromatic Red Cedar.

CEDAR, PHILIPPINE—See Kalantus.

CEDAR, PORT ORFORD—*Chamaecyparis lawsoniana* (A. Murray), Parlatore.

It grows in a narrow belt bordering the coast of southern Oregon and northern California. The heartwood is light yellow to pale brown, and the sapwood is of similar appearance. The wood is of a fine and unusually uniform texture. Available in solid lumber or veneers.

CEDAR, RED—See Aromatic Red Cedar.

CEDAR, SPICEY—*Tylostemon, spp.*

Also called Bogo and Pogo. From Nigeria. The sapwood is grey in color and the heartwood varies from reddish-yellow to bright red, almost cherry; sub-lustrous, medium weight and hard. It is used for light construction work, paneling, doors and furniture.

CEDAR, SPANISH—*Cedrela mexicana*, Roem.

There are many species of Cedar, very similar in structure, marking and colors and they are marketed under a wide variety of names the more commonly used being Cedro or Cedrela and Brazilian, South American, Honduras or Mexican Cedar. This wood from Central America belongs to the Mahogany family, but it is lighter in weight and color than Mahogany, being light red in color, generally straight grain, open, porous, soft towards the heart, of light weight and rather brittle. It has a very fragrant and agreeable scent. Large quantities of Cedar are used for cigar boxes, lead pencils, boat building, and pattern work. Some logs are beautifully figured with wavy, curly and mottled grain and are sliced into veneer for fine furniture, wall wainscoting panels and doors. Flitch cost, 1/28″ thick, varies from 2c to 10c. Lumber 5/8 to 8/4 is available.

CEDAR, SOUTHERN RED—See Aromatic Red Cedar.

CEDAR, TENNESSEE RED—See Aromatic Red Cedar.

CEDAR, WESTERN RED—*Thuja plicata*, D. Don.

It grows in the humid regions along the North Pacific Coast, from Alaska to California, and extends inland from Washington to Montana. The heartwood is reddish-brown, and the narrow sapwood is white. The wood is highly resistant to decay, and is used for exterior work, shingles and siding. It is occasionally used for panelling, the veneers being sawn 1/16″ or 1/8″ thick, either clear or knotty. It is known by many other names, such as Arborvitae, Canoe Cedar, Shingle-wood, Red Cedar Pine, etc.

CEDAR, WHITE—Two species are included in the term White Cedar.

NORTHERN WHITE CEDAR—*Thuja occidentalis*, Linn.

This tree grows in the lake states, and in the northeastern part of the U. S.

SOUTHERN WHITE CEDAR—*Chamaecyparis thyoides* (Linn), Britton.

It grows in the eastern part of the United States, near the coast. Both woods are very light in weight, soft and brittle. The heartwood is light brown, with a reddish tinge. The sapwood is lighter in color than the heartwood, sometimes nearly white. Northern White Cedar, because of low shrinkage characteristics and resistance to decay, is used for canoe and boat planking, although its chief use, because of decay resistance when exposed to weather, is for poles, posts and shingles.

CEDARMAH—Listed as a wood used on the Queen Mary. It is probably an unsual piece of Spanish Cedar or Mahogany, or may be Bosse.

CEDRE—French for Cedar.

CEDRELA—See Spanish Cedar.

CEDRO—See Spanish Cedar.

CEDRO MACHO—See Andiroba.

CEDRON—See Bosse.

CEIBA—*Ceiba pentandra*, Gaertn.

Known in Mexico as Silk Cotton tree and Kapok, and in the Cameroons and Gaboon as Odoum. This is the largest tree that grows commercially in Mexico. The wood resembles Spanish Cedar in texture, but is reddish-gray in color and not as strong or durable. The texture is somewhat similar to Basswood, but softer and lighter in weight. Used for box shooks, plywood cores, wooden shoes, and other uses.

CELTIS—*Celtis soyauxii*, Engl.

The name Celtis has been suggested for this Nigerian timber that has been locally known as Ita, Itako and Ohia. The timber is one of the new woods Nigeria is developing for commercial use. Both sapwood and heartwood are light yellow or whitish in color, hard and fine grained. The grain is interlocked and forms an irregular stripe figure when quartered. Suggested uses, due to the natural bright, fresh appearance, are for cabinet work and flooring.

CERCOCARPUS—*Cercocarpus ledifolius*, Nutt.

This North American wood is known locally as Mountain Mahogany. The wood is a bright clear red or a rich dark brown color, with thin yellow sapwood. The cuttings are small.

CERISE—French for Cherry.

CHAMBICO—*Platymiscium, spp.*

A Mexican hardwood, straight grained, hard and heavy. It is Mahogany color with mixed straight stripes, some dark red, some almost black. Available in lumber or veneers.

CHAMP—*Michelia champaca*, L.

Also called Champa, Champac, Champaca and Champacam. From India and Ceylon. When first cut the wood is quite light in color similar to Yellow Poplar but darkens with age to a deep, warm brown. Straight even grain.

CHAPLASH—*Artocarpus chaplasha*, Roxb.

Also called Chaplis. The tree is a native of India, Burma and the Andaman Islands and the wood is an attractive golden brown color with a satiny lustre, straight with slightly interlocked grain. It resembles Satinwood when polished.

CHATAIGNE—French for Chestnut.

CHECHEM—*Metopium browni*, Urban.

This tree is a native of British Honduras and produces an abundant supply of a wood that resembles American Walnut in color, grain and markings. Large sizes are not available.

CHEE—*Barringtonia acutangula*, Gaertn.

From India and Burma. The wood is a light pink to a reddish-grey and when cut on the quarter shows a silver grain. It is smooth, straight-grained. Medium texture and easy to work. It is used for boat building and cabinet work.

CHEN CHEN—See Ako.

CHENE—French for Oak.

CHENGAL—*Balanocarpus heimii*, King.

The wood from the Malay Peninsula is used locally for heavy construction work. The sapwood is yellow and the heartwood pale yellowish to light brown when first cut and darkening to deep brown upon exposure. Hard and heavy.

CHERRY, AFRICAN—See Makore.

CHERRY, BLACK—*Prunus serotina*, Ehrh.

Black Cherry grows from Maine to eastern North Dakota and southward through the Appalachian hardwood producing area, center of its production, to central Florida and central Texas. The heartwood varies in color from light to dark reddish-brown, while the sapwood is narrow and nearly white. Flitch cost, 1/28″ thick, varies from 2c to 10c. A limited quantity of Cherry burls, crotches and swirls are available, ranging from 10c to 25c in the flitch.

CHERRY, CHOKE—*Prunus Virginiana*, L.

A native of the U. S. A. east of the Rockies. The wood is heavy, dark, close grained, not strong, a light brown with thick light colored sapwood.

CHERRY, FRENCH—*Prunus cerasus*, Linn.

This wood comes from France and England and can be secured in limited quantities. The heartwood is yellowish-brown. Veneer cost, 1/28″ sliced, varies from 3c to 5c.

CHERRY, WILD—*Prunus avium*, Linn.

European Cherry varies in the different countries due to differences in climate and soil. The Cherry from Japan and England—called Gean—ranks with the best of American Cherry, the heartwood having a general pinkish red cast with considerable grain figure showing. It has a close, firm texture, and the pores are fine and numerous.

CHESTNUT—*Castanea dentata* (Marsh), Borkh.

Chestnut grows from southern Maine to northwestern Vermont, southern Ontario and southern shores of Lake Ontario to southeastern Michigan, southward to Delaware and southeastern Indiana, on the Allegheny Mountains to central Kentucky, Tennessee, Alabama and Mississippi. The heartwood is greyish-brown, and the thin sapwood almost white. Plain sawn Chestnut has a grain figure much like that of Oak. A considerable quantity of Chestnut lumber is known as "Sound Wormy Chestnut". Clear Chestnut, free from worm holes, is becoming increasingly scarce, but the grades of clear except for worm holes, and knotty Chestnut with worm holes, materials suitable for antique panel effects and core purposes, are still available in large quantities.

CHESTNUT, ENGLISH—*Castanea vulgaris*, Lam.

The European wood is known as Spanish or Sweet Chestnut and resembles Oak in color and grain, although it does not have the silver rays which make Oak so rich in figure when quarter sawn. It is used for fence posts, brush backs and sometimes for furniture.

CHESTNUT, SPANISH—See English Chestnut.

CHESTNUT, SWEET—See English Chestnut.

CHEWING GUM TREE—See Zapota.

CHICHIPATE—See Billy Webb.

CHICKRASSY—*Chukrasia tabularis*, A. Juss.

This hardwood from India and Burma is also known as Chicrasei, Chickrassee, Chittagong and Yinma. It is a handsome wood toning down to a golden mahogany shade, lustrous, moderately hard and heavy, interlocked grain, roey and wavy. Not difficult to work, but supplies are scarce.

CHICO ZAPOTE—See Zapota.

CHITTAGONG—See Chickrassy.

CHITTAM WOOD—*Cotinus americana*, Nutt.

Also called Smoke tree. This is the Biblical Chittam wood. The wood is light, soft, rather coarse grained, with the heartwood bright clear orange color and the sapwood nearly white. Durable in contact with soil.

CHITTIN WOOD—*Bumelia lanuginosa* (Mich.), Pers.

A wood from the southern United States suitable for veneer cores, 1/28" thick sliced and half round, 2c to 4c in flitch form.

CHUGLAM, BLACK—

Two species are marketed as Black Chuglam but they are quite different in character.

Terminalia manii, King. Also called Kala-Chuglam. From the Andaman Islands. The wood is a greyish-brown color, with a streaky figure similar to grey Ancona Walnut. It is close grained, fairly hard with numerous pores. It is not available in commercial quantities in the U. S. A.

Myristica irya, Gaertn. From Burma, Andaman Islands, Ceylon, Malacca and Malay. The wood is a light brick-red color with darker colored thin veins, close grained with small scarce pores. It is not available in commercial quantities in the U. S. A.

CHUGLAM, WHITE—*Terminalia bialata*, Wall.

From the Andaman Islands. Two different kinds of wood are produced by this tree. The darker wood is sold as Indian Silver Greywood and is described in this book under that name. The lighter colored wood is marketed as White Chuglam and is a consistent yellow straw color, attractive, fine, hard grained and finishes well. It is not available in commercial quantities in the U. S. A.

CINNAMON—*Cinnamomum zeylanicum*, Breyn.

Native of Ceylon. The inner bark produces the cinnamon of commerce. The wood is straw colored with fine grain but works and twists badly, therefore is not suited for cabinet work.

CIRUELA—*Astronium, spp.*

Also spelled Ciruello or Cerirello. This wood from Honduras is a cherry red color with vertical bands of dark brown or black producing very beautiful effects. It is extremely hard and dense, and is used locally for the manufacture of fine furniture. Occasional shipments reach the U. S. A.

CITRON, BOIS DE—French for Satinwood.

CLARO WALNUT—See California Walnut.

COCOBOLO—*Dalbergia retusa*, Hemsley. *Dalbergia hypoleuca*, Pittier.
Dalbergia granadillo, Pittier.

Known also as Nambar. It grows in Panama, Costa Rica and Nicaragua. Yellowish-brown, with violet overtones and definite black veins which vary from straight and narrow to a much interwoven grain, resembling Rosewood. It has a fine, hard texture and finishes to a high polish, and when logs are large enough is used in modern furniture. Flitch cost, 1/28″ thick half round, price range 6c to 10c. Occasionally crotches and burls can be secured ranging in price from 15c to 40c. Lumber, 5/8 to 8/4, kiln dried is available.

COCUS—See American Ebony.

COFFEE TREE—*Gymnocladus dioica*, C. Koch.

A native of Kentucky. The wood is heavy, not hard, strong, coarse-grained and is a rich light brown color tinged with red. The sapwood is thin and light in color.

CONGOWOOD—See African Blackwood and Tigerwood.

COPAIBA—*Copaifera spp.*

Central America. The wood is a reddish brown color with dark streaks, lustrous, moderately hard, heavy and fairly straight grained. It is used for cabinet work.

COPI—See Cupiuba.

CORAIL—See African Padauk.

CORAL WOOD—*Adenanthera pavonina*, Linn.

From India and the Andamans. When freshly cut, the wood is brownish-yellow but it seasons to a bright golden red or coral shade similar to Spanish Mahogany with fine close grain. A very decorative wood, used for cabinet work.

CORDIA—*Cordia goeldiana*, Huber.

This wood from South America is also called Freijo, and is available only in small quantities. It is of medium texture, of a reddish color with plain stripe.

CORKWOOD—See Balsa.

COROMANDEL—See Macassar Ebony.

COTTONWOOD—*Populus deltoides*, Marshall. Eastern Cottonwood.
Populus Trichocarpa hastata, Henry. Black Cottonwood.

The name is applied to ten or twelve closely related species of trees that grow in the United States and Alaska of which eastern Cotonwood and northern Black Cottonwood are the most important. Eastern Cottonwood is widely distributed east of the Rocky Mountains, and Black Cottonwood in the northeast. The wood is light weight, weak, and has a tendency to warp in seasoning. It is odorless, has unusually uniform texture, works nicely and does not split easily. The annual rings are scarcely noticeable. It decays quickly when in contact with the ground. More than one half of the Cottonwood lumber is used in boxes and crates. Other uses include vehicle parts, planing mill products, agricultural implements, woodenware, laundry appliances, and trunks. In addition to the lumber cut, large amounts of Cottonwood are cut into veneer. It is also known as Balm, and Black Balsam Poplar.

COURBARIL—See Guapinol.

CRABOO—See Nanche.

CRABWOOD, AFRICAN—*Carapa Procera*, D. C.

Also known at Okoto, Mbukulu, and Molonkoto. This wood is principally from Belgian Congo. The heartwood is red brown to dark brown and hard, fairly heavy, easy to work and finishes well. It is used as a substitute for Mahogany.

CRABWOOD, SOUTH AMERICAN—See Andiroba.

CUANACAZTLE—See Kelobra.

CUCUMBER TREE—*Magnolia macrophylla*, Michx. f.

A native of Southeastern U. S. A. The wood is hard, close-grained and not strong. It is light brown in the heartwood and the thick sapwood is light yellow.

CUDGERIE—*Flindersia schottiana*, F. v. M.

Sometimes spelled Cudgery, and is known as Silver Ash. Australia. The wood has the characteristics of Ash, is a greyish-white or tawny color, firm, tough, strong, straight and open grain. It is used for the same purposes as Ash. See Bollywood.

CUPIUBA—*Goupia glabra,* Aubl.

The wood from Central America is also called Copi, Copie, Red Copie and Cupiuva. Light reddish-brown or grey color and darkens with exposure. It is hard, heavy, strong and odorous with irregular grain but uniform texture. It is used for furniture.

CURUPAY—*Piptadenia cebil,* Grisebach.

From South America. The wood varies in color from orange-grey to greyish-brown with dark streaks and veins, and occasional logs are reddish-brown marked with wavy, curly grain. The figured logs are sometimes cut into veneer for decorative panelwork.

CUTCH—*Acacia catechu,* Willd.

Also called Kath or Khair. The wood from India and Burma is a bright red mahogany color which darkens upon exposure, close, firm texture, extremely hard and durable. A desirable wood for cabinet work if supplies were available.

CYP—See Canaletta.

CYPRE—See Canaletta.

CYPRESS, AMERICAN BALD—*Taxodium distichum,* Rich.

Generally called Southern Cypress and variously known as red, black, white and yellow Cypress. When grown in swamps near salt water, lumber from this species is called Red Cypress or Tidewater Red Cypress, and when grown inland or upland Yellow or White Cypress. Found in the low swamp lands along the southeastern coast of the United States and as far up the Mississippi River valley as Missouri. The heartwood from Cypress near salt water varies in color from slightly reddish to almost black, while that found farther inland is only slightly reddish or yellowish brown. Moderately light and moderately strong, and the heartwood is highly decay resistant. Used where resistance to decay is an important factor.

CYPRESS, CROTCH—See Faux Satine.

CYPRESS, CONGO—See Vera-wood.

DABE—See Landa.

DABEMA—See Ekhimi.

DAHOMA—See Ekhimi.

DAKAMA—*Dimorphandra latifolia,* Tul.

This wood from Guiana is reddish-brown, very hard and heavy with coarse grain. It is used for general construction and in furniture.

DANIELLIA—*Daniellia, Spp.*

Also known as Faro, Nsou, Olengue, and Singa. Found throughout West Africa with light sapwood and pale reddish-brown heartwood. The wood is fairly soft and is not durable.

DANTA—*Cistanthera papaverifera,* A. Chev.

Also called Otutu. From the Gold Coast and Nigeria. The sapwood is pinkish-yellow and the heartwood is a reddish-brown mahogany color, lustrous and of fine texture, hard and tough. Quarter-sawn veneers show a fine striped effect similar to Sapeli, while the plain-sawn frequently presents a bird's-eye appearance due to pin-knots. This wood is just coming into the market and the timber could be used for tool handles, wagon stock and furniture, while the veneers can be used for decorative work.

DAO—See Paldao.

DARU—*Uranda spp.*

Also called Bedaru. From Borneo and the Malay Peninsula. The wood is light yellow somewhat resembling Satinwood, and shows broken streaks of dark and light color, and is mottled and speckled. It is dense, heavy and of close texture. No large quantities have been available but it should serve as a useful furniture wood.

DEAL—A term applied to converted softwoods between 2 inches and 4 inches thick, and 9 inches and 11 inches wide. The sizes vary at different ports.

DEAL, RED—See Scots Pine.

DEAL, YELLOW—See Scots Pine.

DEAL, WHITE—See European Spruce.

DEGAME—*Calycophyllum candidissimum* (Vahl), D. C.

Degame is imported from Central America. Color yellowish to creamy white, very elastic, bends well. Used for fishing rods, bow staves. Known to the trade as Lemonwood.

DENYA—See Okan.

DE-ORO—*Not Identified.*

One of the light colored woods, that is a creamy white with pale yellow markings. Logs producing fine ripple marks or cross fire are sliced into veneers 1/28" thick. De-Oro is probably figured veneer from Magnolia logs.

DETERMA—See Imbuya.

DHAMAN—*Grewia tiliaefolia,* Vahl.

Also spelled Dhamana, Dhamani, Dhamin and Daman. From India. The wood is reddish-brown with darker streaks and minute flecks of silver grain, close, firm hard texture, smooth and odorous. It is used for furniture and sports equipment but would make a good decorative wood.

DHUP—*Canarium euphyllum,* Kurz.

From India and the Andaman Islands and called Indian White Mahogany in Great Britain. The name of Dhup has been given to many woods of various species. The White Dhup is a pale straw yellow to pinkish grey color, lustrous with interlocked grain. It works easily and has been used in England for planking, flooring and all kinds of decorative woodwork. Black Dhup is very similar, but harder and heavier and more difficult to work with the color varying from yellow to light brown.

DIALYANTHERA—D. Otoba (H. & B.) Warb.

Also called Saba and Seba and is from Costa Rica, Panama, Colombia and Venezuela. The timber is pinkish brown, light and soft, straight grained, very easy to work, holds nails firmly, but is not durable.

DIBETOU—See Tigerwood.

DILLENIA—*Dillenia spp.*

The wood from India includes many varieties. It is reddish grey to purplish or reddish brown, with white lines from the chalky deposits. Interwoven and twisted grain, even and coarse texture. Attractive wavy figure when quarter sawn, or fiddle back when plain sawn. It is sometimes rotary cut for veneers.

DILLY, WILD—See Bulletwood.

DIMPAMPI—See Moabi.

DIOLOSSO—See Ako.

DJAVE NUT—See Moabi.

DOGWOOD—*Cornus florida,* Linn.

This wood is very hard, heavy, and fairly straight grained, and brown in color. Used mostly for spinning chucks, jewelers blocks, and bobbins and shuttles in the silk trade.

DONSELLA—See Almique.

DOUSSIE—*Afzelia pachyloba*—Harms.

This is one of the best quality woods from French West Africa. It is almost identical in appearance and properties to Afzelia.

DOCTOR GUM—See Boarwood.

DUALI—See Palosapis.

EBONY, AMERICAN—*Brya ebenus,* D. C.

The wood from the West Indies is also called Granadillo, Jamaica or Green Ebony and sometimes Cocus. The yellow to rich dark brown background is marked in stripe and grain figure with darker streaks. It is exceedingly hard and capable of receiving a high polish.

EBONY, BENIN—*Diospyros insculpta,* Hutch. & Dalz.

Also known as Uhu, from Nigeria. A hard, white Ebony, rather heavy, very resilient and tough. It is used as a substitute for Ash in making handles for tools, canes and batons. It bends well and could be used for bent parts of furniture.

EBONY, BLACK—*Diospyros tomentosa,* Roxb.

From North Bengal, Madagascar and Cameroon. The wood is black, hard and of great weight.

EBONY, CALAMANDER—*Diospyros quaesita,* Thw.

The wood is known in Ceylon as Calamander. Its closeness of grain, great hardness and fine hazel brown color, mottled and striped with black, render it valuable for veneering and furniture making.

EBONY, CAPE—*Euclea pseudebemus,* E. Meyer.
The blackest of the Ebonies, from South Africa.

EBONY, GABOON—*Diospyros dendo,* Welw.
Also known as Black Ebony, Gabun, Lagos, Calabar, or Niger Ebony. The heartwood is very black and hard.

EBONY, GREEN—See American Ebony.

EBONY, JAMAICA—See American Ebony.

EBONY, MACASSAR—*Diospyros melanoxylon,* Roxb.
Also called Coromandel, and sometimes Marblewood. This wood is imported from the East Indies. The background is dull black, and has startling bizarre markings in mixtures of grey, brown, orange and yellow. The wood is always quartered for in many logs the pigment coloring lies in such uniform bands of gray and brown as to form straight, narrow stripes. Flitches are sawn 1/24" thick, ranging in price from 10c to 30c. Lumber, 3/8 to 8/4 is available in limited quantities.

EBONY, MOZAMBIQUE—See African Blackwood.

EBONY—*Diospyros ebenum,* Koenig.
Grows abundant throughout the flat country west of Trincomalee in Ceylon. The wood is jet black, and excels all others in the fineness and intensity of its dark color.

EBONY—*Diospyros Montana,* Roxb.
Another East India species, produces a yellowish gray, soft, but durable wood.

ECKOU—See Ako and Emien.

EDINAM—See Gedu Nohor.

EGIN-FIFEN—See Ayous.

EKHIMI—*Piptadenia africana,* Hook.
Also called Agboin, Dabema and Dahoma. It is reported this Nigerian and Gold Coast timber will be available in commercial quantities. The sapwood is pale straw to greyish-red color, and the heartwood is light brown to golden brown with a ribbon-grain producing zones of dark and light color with considerable sheen and lustre. Very durable, moderately hard, termite-resistant, tough and strong, coarse texture but uniform and works easily. It can be used for cabinet work or as a structural wood.

EKKI—*Lophira alata var procera,* Burtt Davy.
Also called Red Ironwood, Azobe, Bongosi, Bole, Kaku. The heartwood of this Nigerian wood is dark red to chocolate brown, with speckled appearance, no lustre, extremely hard, very heavy and coarse texture. It is used for wharf building and flooring.

EKUSAWA—See Opepe.

ELEMI—See Papo.

ELM—Three species constitute the greater part of the Elm lumber produced in the United States.

AMERICAN ELM—*Ulmus americana,* Linn.
Also known as Soft Elm, White Elm, Water Elm, Swamp Elm, Gray Elm, and in quartered veneer has been sold under the trade name "Prinzwood." The growth range of American Elm includes most of the area east of the Rocky Mountains. This wood makes a very beautiful and serviceable veneer, either rotary cut or sliced. The northern wood of American Elm, due to its slow growth, has a finer and more uniform texture than the Southern Elm, averaging about 21 annual rings per inch as compared with 14 in Southern Elm. Northern Elm has less interlocked and diagonal grain and more spiral grain. The heartwood is a light brownish red tinged with darker brown ring marks, usually showing considerable figure in rotary cut veneers. It is also used for core stock and crossbandings.

ROCK ELM—*Ulmus racemosa,* Thomas.
Also known as Hickory Elm, Cork Elm, and Cork Bark Elm. The tree grows largely in the North Central States, the principal supply coming from the Lake States. Rock Elm is heavy, hard, and strong, and has a high capacity to resist shock. It is valuable for its strength, nail holding properties, and bending qualities. The heartwood is light grayish brown, often tinged with red. The sapwood is white.

SLIPPERY ELM—*Ulmus fulva,* Michx.
It is very commonly known as Red Elm. The growth range includes most of the area east of the Rocky Mountains.

ELM, CARPATHIAN BURL—*Ulmus campestris,* Linn.
Imported largely from France and in smaller quantities from England and the Carpathian Mountains. The figure varies from the same stump, ranging from small compact figure like Ash or Oak burl to wild and grainy growth patterns, while the color varies from almost brick-red to light tan with defects of all kinds in almost every burl, requiring expert veneer matching to produce a fine face veneer. The half round or sliced veneer 1/28" thick ranges in price of flitch stock, according to the amount of figure, from 10c to 35c.

ELM, CROWSFOOT—See Royal Tartan.

ELM, ENGLISH—See Carpathian Elm.

EMBUIA—See Imbuya.

EMERI—See Ireme.

EMIEN—*Alstonia congensis*, Engl.

Also known as Alstonia, Sindru, Eckou, Bokuka, and Otondo. The wood is found on the West Coast of Africa but is most abundant in the humid forests in the Cameroons. The veneer is white in color with no difference between sapwood and heartwood. It is soft, light in weight, has a fine texture, is easy to work and finishes smoothly.

EMRI—See Framerie.

ENCINO ROBLE—*Tabebuia spp.*

This Mexican tree produces a very heavy, close grained hardwood that works easily. The sapwood is a brownish-yellow color, and is sharply separated from the heartwood which is a dark, leathery brown with black pigment lines. It is used for furniture, vehicle stock, turnery and billiard cues. It is available in lumber or veneers.

ENG—*Dipterocarpus tuberculatus*, Roxb.

Also called In. The tree is a native of India and Burma and the wood is similar to Gurjun, Yang and Borneo Camphorwood, the color being a dull reddish-brown, with gummy pores and a pleasant, aromatic scent. It is of hard texture, straight grained and works easily. Difficult to season.

ERABLE—French for Maple.

ERIMADO—*Ricinodendron africanum*, Muell. Arg.

Also known as Munguella, Anawarma, Sanga, Webango, and Olela. The wood is white or straw-colored and is very soft and extremely light. Will weigh as little as 12 lbs. to 15 lbs. when kiln dried.

ESAKA—See Gedu Nohor.

ESPINILLO—*Gleditschia amorphoides*, Taub.

Also called Espina Corona. This South American wood is found largely in Brazil. The wood is reddish-brown with lighter streaks and is hard, heavy and tough. Roey, medium texture, smooth and not difficult to work. May be used for most purposes.

ESTRIBEIRO—*Luehea divaricata*, Mart.

Also spelled Estriveiro, and is sometimes called Acoita-cavallo. From Brazil. The wood is grey varying to pinkish brown with variegated streaks, moderately hard and heavy, smooth with uniform grain and texture like Beech. Some logs show a roey figure. It is used for interior construction and furniture.

EUCALYPTUS—There are over one hundred different species of Eucalyptus trees growing in various parts of the world. Only a few produce a commercial supply of lumber or veneers, and are known by various trade names. For descriptions see Mountain Ash, Blue Gum, Jarrah, Karri, Yuba, Bloodwood, Spotted Australian Gum, Ironbark and Forest Red Gum.

EVINO—*Vitex pachyphylla*, Baker.

This is known as Angona and Evino in Gaboon and as Evou in the Cameroons and as Vindou in West Africa. The color is a light grey brown with little difference between sap and heartwood.

EVOU—See Evino.

EWOWO—See Ayous.

FARO—See Daniellia.

FAVEIRO—*Pterodon pubescens*, Bth.

This wood from Brazil is sold as Yellow Faveiro or Red Faveiro although all of it is a yellow color, that sold as yellow being a whitish yellow and that sold as red being a dark yellow. It is used for exterior construction work and railroad ties.

FAUX SATINE CROTCH—*Taxodium distichum* (Linn), Richard.

A trade name applying to Cypress crotches—the wood comes from the formation between the trunk and buttressed roots. A light tan, woolly type of wood containing much oil. The crotches have some feathertype figure, but most of them are more of a mottle figure spread out in crotch form. This can be obtained in 1/28″ sliced veneer.

GUARABU—*Terminalia acuminata,* Fr. Allem.

Also spelled Garabu. This wood from Brazil is a light purple color, lustrous, with a very hard, close grain and texture. It is similar to and often marketed as Purpleheart.

GUARANTAN—*Esenbeckia leiocarpa,* Engl.

Also spelled Guaranta, and is probably the same as the wood known as Larangeira. The tree is a native of Brazil and produces a pale, yellow straw-colored wood with a dense, close grain and slightly lustrous. It is used for outdoor work.

GUAREA—See Bosse.

GUATAMBU—See Piquia Peroba.

GUAYABI—*Patagonula americana,* L.

Also spelled Guayabira. Central America. The wood is variegated brown to purplish black, very hard, heavy, strong, durable and resilient. Straight grain and rather fine texture.

GUAYACAN—See Lignum Vitae.

GUAYAMERO—*Brosimum columbianum,* Blake.

From Central America. The wood is white to greyish yellow, hard, heavy, strong, straight grained, medium texture. It is used as a substitute for Hickory.

GUIJO—*Shorea guiso,* Blume.

Also known by the copyrighted name of Orion. A reddish wood from the Philippine Islands, hard, heavy, with medium fine texture and cross grained. When quartered it shows a beautiful figure. Fair quantities are obtainable for furniture and cabinet work.

GUINEA WOOD—*Dracontomelum magiferum,* Blume.

This wood from New Guinea is also called Guinea Walnut and belongs to the same family as Paldao but is softer and lighter textured than the Philippine species. It is marketed as a substitute for Oriental Wood.

GULU—See Opepe.

GUM ARABIC—*Acacia senegal.* Tropical Africa.
Acacia arabica, Willd. India.

The Babul tree mostly known for the Gum Arabic of commerce. The wood is reddish-brown, with a hard, strong grain.

GUM, BLACK—*Nyssa sylvatica,* Marsh.

Also called Sour Gum and Pepperidge. It is similar to Tupelo Gum, firmer in texture, but heavier in weight and warps more easily. Quarter sliced Black Gum exhibits a beautiful, changeable ribbon stripe due to its interlocked grain.

GUM, BLUE—*Eucalyptus globulus,* Labill.

Frequently called Australian Blue Gum as most of the commercial supply comes from Australia. When freshly cut the wood is a pale straw-yellow color with a twisted or curly grain, and firm texture. Upon exposure it turns to a beautiful pale brown or red background with darker reddish-brown broken stripes, and a fine curly cross-fire figure. Veneers are available 1/28″ quarter sliced or 1/24″ quarter sawn.

GUM, BOLLY—See Brown Bollywood.

GUM, FOREST RED—*Eucalyptus tereticornis,* Sm.

Australia. The wood is deep red, hard, heavy, strong, tough and durable with straight and interlocked grain. It is used for structural work, piling and furniture.

GUM, RED—*Liquidambar styraciflua,* Linn.

This species is very commonly known as Southern Gum, Bilsted, Sweet Gum, Starleaved Gum, and in Europe the Sap Gum is known as Hazel Pine and the Red Gum as Satin Walnut. Commercially the name "Red Gum" applies to the heartwood only, the sapwood being marketed as "Sap Gum." It grows in the United States south of a line from Providence, Rhode Island, thru southern Illinois and eastern Texas (except in southern Florida), and in the mountains and highlands of central and southern Mexico and Guatemala. Its commercial range is restriced to the moist lands of the lower Ohio and Mississippi basins, and the southern and Gulf coasts. The heartwood is reddish-brown, sometimes containing dark streaks due to natural deposits of coloring matter in the wood. Such lumber is called "Figured Red Gum," and that without streaks "Plain Red Gum." The sapwood is pinkish white, unless blued by sap stains, fungi, or darkened to a pinkish red by steaming or dipping.

GUM, SPOTTED AUSTRALIAN—*Eucalyptus maculata,* Hook.

This wood from New South Wales and Queensland is similar to Ironbark but yellowish-brown and much easier to work. It is used on the Pacific Coast for wagon stock in place of Hickory and Oak. It has been used in shipyards as a substitute for Ironbark. It is also called Australian Hickory.

GUM, TUPELO—*Nyssa aquatica,* Linn.

Also called Cotton Gum, Tupelo, Swamp Tupelo, Swamp Gum, Hazel Pine and Bay Poplar. It grows throughout the coast region from southern Virginia to northern Florida, and through the Gulf states to Texas and northward thru the Mississippi River bottom lands to southern Illinois. The white sapwood merges gradually into the pale brownish-gray heartwood, and in a general way resembles Yellow Poplar and dries flat.

GUMHAR—*Gmelina arborea,* Roxb.

From India and Burma. Also called Yamane. The wood is of a pale yellowish-white color and resembles Prima Vera in color, texture and grain, while it possesses the roe and mottle figure common in Mahogany. It is used for decorative furniture and cabinet work.

GURJUN—*Dipterocarpus, spp.*

About nine species are grouped together and sold as Gurjon in England and Kanyin in Burma. From Burma, India and the Andaman Islands. The wood is very similar to Eng, Yang, Borneo Camphorwood, Hollong and Hara. It is a brown color to yellowish tan with a stripe figure and is used for flooring.

HACKBERRY—*Celtis occidentalis,* Linn.

The range of Hackberry extends from New England to Virginia and westward to eastern North Dakota, Iowa, southwestern Missouri and western Kansas. Sugarberry—*Celtis laevigata,* occurs from the coast of Virginia to southern Florida and westward thru the Gulf states to the valley of the Rio Grande and to eastern Texas, Arkansas, eastern Oklahoma, Missouri, eastern Kansas, southern Illinois, Indiana, Kentucky and Tennessee. Both Sugarberry and Hackberry species are marketed as Hackberry. In color it is more yellowish than Ash. Hackberry—*Celtis spp.* is also very abundant in British Honduras.

HADANG—*Cordia macleodi,* Hook. f. et T.

From India and Burma. The wood when cut is light to olive brown, darkening upon exposure to a dark reddish-brown color with darker streaks, hard, strong, tough and durable, fairly lustrous with a smooth, oily feeling. It is used for a decorative wood.

HALDU—*Adina cordifolia,* Hook. f.

The tree is a native of India, Burma and Ceylon. The wood is well known as Hnaw in Burma, is a bright yellow or Satinwood color with a very fine, close texture. It darkens with exposure, is moderately heavy and strong, straight or interlocked fine grain.

HALMILILLA—See Trincomali Wood.

HAREWOOD, ENGLISH—*Acer pseudoplatanus,* Linn.

Harewood is a species of Maple, and is called Sycamore in England. Various processes are used to produce exceptionally fine face veneers. The figured logs are sawn into planks four inches thick, air-dried for three months, and then sliced or cut on the half round into veneers from 1/28″ to 1/100″ thick. This produces the natural color which is called White Harewood, a finely figured veneer with cross-fire or fiddle-back figure. White Harewood can be successfully dyed to many different colors, the most popular being silver gray (sometimes called Greywood), pink (rose) and weathered. Small quantities of solid lumber are available in 4/4 and 5/4 in the White Harewood and the Gray Harewood. Flitch costs vary according to the thickness, figure, color and size. In general 1/28″ white Harewood ranges from 5c to 20c; pink or weathered from 5c to 20c; and gray from 15c to 30c.

HAREWOOD, SAN DOMINGO—*Zanthoxylum spp.*

Also known as Concha Satinwood. From San Domingo and the West Indies. The wood is similar to San Domingan Satinwood, yellow in color and displaying a beautiful satiny lustre but duller and browner in tint and often traversed by black gum streaks. Upon exposure to light and air its greyness gradually increases to a silver-grey hue. When cut for veneers, it shows a good roe and mottle figure with a preponderance of fiddle back effect.

HAWTHORNE—*Crataegus crus-galli,* L.

A native of Eastern U. S. A., it is also called Thornapple. The wood is heavy, hard, tough and close-grained. The heartwood is reddish-brown and the sapwood pale. It is widely planted as an ornamental tree.

HAZELWOOD—See Red Gum.

HEMLOCK, EASTERN—*Tsuga canadensis* (Linn). Carriers.

Grows principally in the lake states, and in the mountains in the eastern part of the United States. Pale buff in color with a reddish tinge, moderately light and moderately low in strength, used largely for framing, sheathing, roofing and sub-flooring.

HEMLOCK, WESTERN—*Tsuga heterophylla* (Raf.), Sargent.

There are large stands along the Pacific Coast, from Alaska to northern California, penetrating farther inland just below the Canadian boundary than elsewhere. This species, which is sold commercially as West Coast Hemlock is distinct from Eastern Hemlock. It is uniform, fine textured and straight grained. It is also known as Hemlock Spruce, Western Hemlock Fir, and Alaska Pine.

HETRE—French for Beech.

HICKORY, AUSTRALIAN—See Spotted Australian Gum.

HICKORY, PECAN—See Pecan.

HICKORY, TRUE—*Hicoria lacinosa* (Mich. f.), Sargent, Big Leaf Shagbark Hickory.
Hicoria alba (Linn.), Britton, Mockernut Hickory.
Hicoria glabra (Miller), Sweet, Pignut Hickory.
Hicoria ovata (Miller), Britton, Shagbark Hickory.

The true hickories are found throughout most of the eastern half of the United States, and are similar in their properties. Hickory is commonly classified as white (sapwood) and red (heartwood), and both are of the same strength and weight. It is very tough, hard and strong, and shock resistant, the combination of which is not found in any other native commercial wood. Pecan Hickory is described under Pecan.

HNAW—See Haldu.

HOG GUM—See Boarwood.

HOLLOCK—*Terminalia myriocarpa,* Heurck & Muell, Arg.

Also known as Panisaj, Lepcha, and Sunloch. The tree grows in India and Upper Burma and produces a wood that is greyish-brown in color with beautiful dark stripes similar to Ancona Walnut. It is lustrous, moderately hard, heavy, durable, strong and very stable, smooth with straight wavy grain but coarse texture. It is used for furniture and plywood.

HOLLONG—*Dipterocarpus pilosus,* Roxb.

From India and the Andaman Islands. The wood is slightly browner in color, and generally lighter in weight and more open grained than Gurjun.

HOLLY—*Ilex opaca,* Aiton.

It grows from Maine to Florida, thru parts of the Ohio and lower Mississippi valleys, and reaches its greatest size in the states bordering the west bank of the Mississippi. It is also found in South and Central America. It is light cream to grayish-white, hard, and of such uniform texture that its growth lines are almost indistinguishable. It is used in the white for inlay work, and in many dyed colors.

HONEYSUCKLE—*Banksia marginata,* Cav.

From Tasmania. The wood is a pinkish-brown color rather soft with a spider-web or network appearance. It is used for cabinetwork and turnery.

HONEYSUCKLE, NEW ZEALAND—*Knightia excelsa,* R. Br.

Also called Rewa-Rewa. From New Zealand. Authorities differ on the color, some describe it as a wood deep red in color and beautifully mottled in silver grain, while others find it a light grey straw color with pinkish flecks. It is lustrous with minute pores.

HOOBOOBALLI—*Loxopterygium sagoti,* Hook. f.

Also known as Hububalli, Surinam, Snakewood and has been included in shipments of Zebrawood. From Tropical America. The wood is yellowish to reddish-brown color with dark streaks and flecks, moderately hard and heavy, fairly straight close grain with medium texture. Smooth and easy to work. Used for furniture.

HORA—*Dipterocarpus zeylanicus,* Thw.

This Ceylon wood is generally sold as Gurjun.

HORMIGO—See Macawood.

HORCO CEBIL—*Piptadenia communis,* Bth.

This South American wood is the color of light Mahogany, very hard, heavy, dense and smooth, but not durable. It is used for cabinet work.

HORNBEAM—*Carpinus betulus,* L. Europe.
Carpinus caroliniana, Walt. Canada.

Also called Blue Beech. The Canadian tree is small, rarely 40 feet, but the European tree grows to 60 or 70 feet. The wood is yellowish-white, close-grained, hard, tough and strong. It is used for handles and agricultural implements, vice screws and cog wheels. Small quantities have been used in the U. S. A. for custom-made furniture. Hop Hornbeam is found scattered east of the Great Plains region and is frequently sold as Ironwood.

HORSE CASSIA—See Cana Fistola.

HORSE CHESTNUT—See Buckeye.

HUBUBALLI—See Hoobooballi.

HUDOKE—See Sucupira.

HUNG-CHAI—*Ormosia, spp.*

From China. The wood is a bright, strong, rich, red color with a metallic lustre, hard, heavy and close-grained. It is beautifully marked and esteemed for high-class cabinet work.

HURA—*Hura crepitans,* L.

Also called Possum Wood and Rakuda, and has been incorrectly applied to Aspen veneers. This wood from Dutch Guiana is a light yellow color.

IBIRARO—*Pterogyne nitens,* Tul.

From Argentina. The wood is light brown and sometimes contains black stripes. It darkens with exposure and is hard, heavy, strong and durable. Irregular grain and roey. It is used for cabinet work.

IBIRA-NIRA—*Bumelia obtusifolia,* Roem. et Schult.

This hardwood from Central America is a species of Buckthorn. The wood is yellowish-brown with greenish streaks, lustrous, very hard, heavy, brittle and not durable. It is fairly straight grained with a fine smooth texture. It is used for furniture.

IDAGBON—*Pausinystallici, spp.*

A Nigerian hardwood, also called Nikiba that is used as a substitute for Boxwood and Pearwood. The wood is a light orange brown color with pink stripes, hard and heavy with the characteristics of Boxwood. It is used for fancy articles, turnery and carvings.

IDIGBO—See Ireme.

IMBUYA—*Phoebe porosa,* Mez.

Sometimes spelled Embuia or Imbuia. Also called Determa, and frequently misnamed Brazilian Walnut although it really is not a Walnut. This wood from Brazil is a rich brown color, finely figured and occasionally comes in blistered flitches averaging about six feet long. The plain flitch costs from 3c to 6c, and the figured 8c to 20c. Solid lumber can be secured from 4/4 to 16/4.

IN—See Eng.

INCA—*Not identified.*

This wood is probably from Brazil or Argentina. It is available in veneer form and is sold as Inca Burl. It is a splendid decorative wood, light brownish-red with distorted grain markings and rather large burl eyes in a darker brown color.

INDIAWOOD—See Indian Silver Greywood.

IPAKI—See Gedu Nohor.

IPE—*Tecoma, spp.* also *Tabebuia, spp.*

Numerous species in Brazil are sold by the common name of Ipe or Pao d'arco (Arch Wood). Other names are numerous such as Yellow Guayacan, Bastard Lignum-Vitae, Surinam Greenheart, Bethabara, Lapacho and many others. In Brazil the wood is used for carts, barrels, general construction work, and piles but it is a good decorative wood. Shippers in Brazil designate the color as yellow or cascuds for the light yellow wood and black or tobacco for the dark brown spotted timber. The wood is generally a lustrous brown color with a slightly greenish tinge with a close, firm grain. Some logs are highly figured, with small broken roe and mottle and veneers are cut which look like a dark golden-brown Ceylon Satinwood and are used for high-class decorative work.

IPIL—*Intsia bijuga,* O. Ktze.

From the Philippine Islands. The wood is bright yellow when cut, turning to reddish brown or rusty brown upon exposure. Grain straight or slightly crossed, texture rather coarse. It is closely related to Black Locust. Fair quantities are obtainable for furniture and cabinet work.

IREME—*Terminalia ivorensis,* A. Chev.

Also called Idigbo, Black Afara, Framire, Framerie, Emri, Emeri. From Gold Coast of Africa. The veneer is pale yellow to light brown in color and is similar to White Afara. Flitch cost, 1/28" quarter sliced, varies from 3c to 5c.

IROKO—*Chlorophora excelsa,* Bth. & Hook.

Also called Kambala, Cambala, Odoum, Oroko, Oloko and sometimes erroneously called African Oak or African Teak. It comes from West Africa and the color varies from a very light golden brown to a rich warm brown, always inclined to bleach after exposure. The grain is somewhat interwoven. Veneers produce a handsome effect and are used for furniture and wainscoting.

IRONBARK, GRAY—*Eucalyptus paniculata,* Sm.

IRONBARK, RED—*Eucalyptus siderophloia,* Benth.

From Australia. The Gray Ironbark ranges in color from a light to a very warm brown Walnut shade with hard, compact grain, strong and heavy. The Red Ironbark is brown tinged with red, with a rather coarse, open, inter-locked grain. Both woods are used for boat construction.

IRONWOOD—Applied to nearly 100 different woods throughout the world. They are hard, heavy, tough, dense, durable and difficult to work. Many of them are species of Acacia. In the U. S. A. Ironwood generally refers to Blue Beech and Hop Hornbeam.

IRONWOOD, RED—See Ekki.

ITA—See Celtis.

ITAKO—See Celtis.

ITALIAN OLIVE—See Olive, Italian.

ITRAC—Trade name for Yakal or Borneo Hopea.

IVORYWOOD—

Several different woods from different countries are called Ivorywood.
Siphonodon australe, Bth. This wood from Queensland is ivory white in color, very hard and heavy, fine straight grain and even texture.
Rhamnus zeyheri, Sond. Generally called Pink or Red Ivorywood. From South Africa. The wood is a reddish color, very hard, heavy and strong with a fine even grain. It is used for turnery inlays, carvings and drafting instruments.
Balfourodendron Riedelianum. From Central America. The wood is ivory white to yellow color with fine darker streaks, very heavy, hard, tough and strong but not durable. Fine, smooth, straight and wavy grain but fairly easy to work. It is used for cabinet work and turnery.

IXORA—See Indian Silver Greywood.

JACARANDA—See Brazilian Rosewood.

JACKWOOD—*Artocarpus integrifolia*, Linn.

Also known as Jak. This wood from India when first cut is a brilliant orange or yellowish-brown color, but darkens with exposure to a warm brown color. It is moderately hard, heavy, strong and durable, with a coarse and variable texture that makes it difficult to work. It is used for cheap furniture.

JAGUA—*Genipa americana*, Linn.

Also called Jacua and Genipa. This Central American wood is a light straw yellow, hard, heavy, tough, elastic and strong. It has many of the properties and uses of Ash with fairly straight grain and rather fine texture and is not difficult to work.

JAK—See Jackwood.

JAMAN—*Eugenia jambolana*, Lam.

This wood from India is sometimes called Black Plum. The color is a reddish or brownish-grey with darker streaks and fairly lustrous. It is moderately hard, heavy, strong and fairly durable. Irregular and wavy grain, some interlocked with medium coarse texture. It is used for decorative paneling and doors.

JAMBA—See Pyinkado.

JARRAH—*Eucalyptus marginata*, Sm.

This wood from Western Australia is a bright brick-red color, close texture with interwoven grain and occasionally figured like Mahogany. Used in many classes of construction work where its durability and beauty make it a valuable wood, such as flooring, stairwork, interior finish and high-class cabinet-work. The curly-grained wood is cut into veneers for decorative paneling.

JEBU—An English term used to describe the plainer grades of Sapeli veneer.

JENISERO—See Kelobra.

JEQUITIBA—*Cariniana, spp.*

Also called Albarco and incorrectly named Brazilian Mahogany or Colombian Mahogany. This South American wood is light brown in color, smooth grain, close, dense texture and a lustrous surface. It is used for cabinet work and decorative paneling.

JOBILLO—See Goncalo Alves.

JOBO—*Spondias, spp.*

This wood from Mexico is reported to be similar in color and texture to Ash.

JUNIPER—See Aromatic Red Cedar.

KAKU—See Ekki.

KALA-CHUGLAM—See Black Chuglam.

KALANTUS—*Toona calantas*, Merr. et Rolfe.

Also spelled Calantas and sometimes called Philippine Cedar. A Philippine wood, light, soft with the heartwood usually about the color of Spanish Cedar varying from light to dark red. It has a strong Cedary odor and is used for furniture and cabinet work when available.

KALMANSANAI—*Neonauclea spp.*

Also spelled Kalamansanai. This wood from the Philippine Islands is commonly yellow to bright rose-red when cut but fades to dull yellow either uniform or mottled with faint pinkish, reddish or brownish tints. Only small quantities are available.

KALUNGI—See Gedu Nohor.

KALUNTI—*Shorea mindanensis*, Foxw.

From the Philippine Islands. A light yellow or light greyish wood similar in general characteristics to White Lauan. Fairly large quantities are obtainable for cabinet and furniture work. It is used for the same purpose as Bagtikan, Almon and White Lauan.

KAMASHI—See Niove.

KAMBALA—See Iroko.

KANDA—*Tylostemon, sp.*

This West African wood is red brown, moderately hard with fairly fine texture and is easy to work.

KANTATE—See Opepe.

KANYIN—See Gurjun.

KAPAR—See Keruing.

KAPOK—See Ceiba.

KAPUR BARUS—See Borneo Camphorwood.

KARELIAN BURL—See Norway Birch.

KARRI—*Eucalyptus diversicolor* F. v. M.

This wood from Western Australia is similar to Jarrah in appearance, red in color, heavy, tough, dense and elastic. Not so strong as Jarrah and not so durable in the ground. It is used for ship building, wagon spokes, beams and wooden pipes. It is reported to be suitable for fireproof construction and can in a marvellous degree withstand the ravages of fire.

KELOBRA—*Enterolobium cyclocarpum* (Jacq.), Gris.

This wood from Mexico, Guatemala and British Honduras is also known as Genizero, Parota, Cuanacaztle, Guanacaste and Jenisero. It has a warm brown background with a slight greenish caste, coarse texture, and a pronounced break between the sapwood and heartwood. The longwood frequently has a striking large figure with wavy lines. The crotch produces a striking figure and beautiful effects can be secured with expert matching. Flitch cost, 1/28″ thick, varies in plain cuts from 2c to 5c with crotch figure varying from 12c to 20c. Solid lumber 4/4 to 8/4 is available.

KENYA—*Dalbergia or Machaerium, spp.*

This wood has not been definitely classified, but probably is a timber obtained from Kenya Colony in East Africa. Logs have been imported in good commercial quantities and lumber or veneer can be secured. In veneer form the wood looks like a Rosewood, Kingwood or Sissoo. The background is a rich violet-brown, streaked with darker grain markings in unusual patterns. Some logs produce veneer that is all light and dark brown while others produce the same violet-brown background with dark green pigment lines. The dark green lines may be due to coloring matter put in the ground while the tree is growing, or it may be due to natural soil conditions. Kenya wainscoting produces most bizarre effects and is used where unusual color is desired. Lumber can be cut to order.

KERUING—*Dipterocarpus spp.*

Many species are shipped from the Malay Peninsula and North Borneo. The timber is sold as Keruing or Kapor. The color is generally similar to Gurjun or Borneo Camphorwood, a dull reddish-brown or tan with a stripe figure. Kruin and Kruen are obsolete names for this wood.

KEWAZINGO—*Copaifera demeusi,* Harms.
Copaifera tessmannii, Harms.

Kewazingo or Kevazingo is a commercial wood shipped from Gaboon and a minor veneer used in furniture. It is closely related to Bubinga and the French have called both of them African Rosewood. The wood does not show alternate light and dark wood as Brazilian or East India Rosewood, but is more like Honduras Rosewood, and resembles Mahogany.

KHAYA—See African Mahogany.

KIMPANGA—See Olon.

KINGWOOD—*Dalbergia cearensis,* Ducke.

Sometimes known as Violetta, Violet-Kingwood or Violet-wood. The tree is a native of the Guianas and Brazil, and has characteristics of the Rosewood group. When first cut the color ranges from violet to deep purple that fades to dull reddish-brown when exposed to light. Limited quantities are available.

KOA—*Acacia koa,* Gray.

Imported only from the Hawaiian Islands, this wood was originally used for ukeleles, but is now being used as a fine figured veneer for plywood and doors. The wood is a golden-brown frequently marked with black lines when quarter sawn, and a few flitches develop a perfect fiddle-back figure. It has a walnut-like texture and lustrous sheen. Flitches are 1/28″ thick, flat cut or quartered according to quality of the log; plain flitches costing from 3c to 5c while the quartered figure flitches cost from 5c to 15c. Small quantities of lumber 4/4 are available.

KOKKO—*Albizzia lebbeck,* Bth.

Sometimes incorrectly called East Indian Walnut or Lega. This wood originates in the Andaman Islands, and is related to Laurelwood. The background is a greyish-brown color, marked with black lines, sometimes quite well figured. Flitch cost, 1/28″ thick, varies from 3c to 5c. Solid lumber can be secured from 4/4 to 8/4, and veneer sliced cut or sawn.

KORINA—A trade name for Limba.

KREUN—See Keruing.

KROY—*Not identified.*

This wood is available in commercial quantities and is marketed as Kroy and has been suggested as a substitute for Indian Silver Greywood. The background is a yellowish-brown color with dark brown irregular streaks producing unusual and striking effects. Veneer is sliced 1/28″ thick, on the quarter, and can be used for wainscoting, doors and cabinet work.

KUSSIA—See Opepe.

KUSSIABA—See Opepe.

KWADWUMA—See Bosse.

KWABOHOR—See Bosse.

KYEN KYEN—See Ako.

LACEWOOD—*Cardwellia sublimis,* F. Muell.

Frequently called Selano, Silky Oak, Queensland Silky Oak and Austrailian Silky Oak although in reality it is not related in any way to the Oak species. The Lacewood tree grows throughout northern Queensland, Australia and down into New South Wales. The color is a pale pink with a silvery sheen, and is quarter sliced to produce small, uniform flakes, a difficult task except with perfectly straight grained logs. If the tree has twisted in growth a sheet of veneer may have small flakes at one end and large ones at the other. Quarter sliced veneer can be obtained from 1/100″ to 1/4″ in thickness, the 1/28″ flitches costing from 3c to 8c. Solid lumber 4/4 to 8/4 can be secured in limited quantities.

LAMAO—A copyrighted trade name for White Lauan, Almon or Bagtican.

LANCEWOOD—*Oxandra lanceolata,* S. W. Baill.

Also known as Yaya. A pale yellow wood from South America resembling a dull Satinwood with smooth, close grain which splits easily. It is used for cart shafts, bows and measuring rods.

LANDA—*Erythroxylum Mannii,* Oliv.

Also known as Dabe and Bimini. Principal source is the Cameroons. The heartwood is pale brown to reddish brown and has numerous pink flecks which tend to hurt the appearance of the veneer.

LANETE—*Wrightia laniti,* Merr.

From the Philippine Islands. White to pale yellow; soft to moderately hard; light to moderately heavy; texture fine and smooth with a straight grain. The wood is scarce and largely used for carved ornaments.

LARANGEIRA—See Guarantan.

LARCH, EUROPEAN—*Larix europaea,* D. C.

A native of England and found throughout Northern Europe, and is considered England's most important softwood. The color of the wood varies from a light, bright red to a warm brick color, always marked with lighter and darker streaks. It is an exceedingly durable wood under all conditions, and is used for wharfing timbers, piles, flooring and ties.

LARCH, WESTERN—*Larix occidentalis,* Nutall.

A native principally of the "Inland Empire." The heartwood is reddish-brown, and the sapwood is yellowish white. The wood splits easily, and is subject to ring shakes, is heavy, strong and stiff. It is logged with Douglas Fir, and frequently sold with Fir as Larch-Fir.

LAREDO—See Capomo.

LAUAN, RED—*Shorea negrosensis,* Foxw.

This wood from the Philppine Islands is sometimes spelled Lauaan. The color shades from light red to dark reddish brown, grain crossed, texture coarse. When quartered it has a conspicuous ribbon stripe. Easily obtainable in large quantities. it is used for furniture, doors and cabinet making of all kinds.

LAUAN, WHITE—*Pentacme contorta,* Merr.

This wood from the Philippine Islands is sometimes spelled Lauaan. Light to greyish brown to light reddish-brown, medium heavy, grain crossed, texture rather coarse. Large quantities are available for furniture and cabinet work.

LAUAN, YELLOW—See Sinora.

LAURACK—See Acle.

LAUREL—*Laurus nobilis,* L.

A native to the Mediterranean region, and is often called the Baytree or Sweet Bay. The wood has a grain and color similar to English Walnut and is a good cabinet wood.

LAUREL, ALEXANDRIAM—See Poon.

LAUREL, AMERICAN—*Kalmia Latifolia,* Linn.

Limited quantities are found in the mountainous sections of the United States. The wood is close grained, and dark brown in color. 1/28″ half round flitches cost from 3c to 10c.

LAUREL, AUSTRALIAN—See Oriental wood.

LAUREL, CALIFORNIA—See Myrtle Burl.

LAUREL, EAST INDIAN—*Terminalia tomentosa,* W. et A.

A native of India and Burma. There are many varieties of East Indian Laurel. All varieties are sometimes called East India Walnut, but are not true Walnut species. The wood has a gray or brown background, streaked with black lines with occasional block-mottle or fiddle-back figure. Coarse-grained, hard and brittle, Laurelwood is flat sliced in the small crooked logs and quartered in the larger ones. Flitch cost 1/28″ thick plain varies from 4c to 6c, while the quarter figured varies from 6c to 15c. Solid lumber can be furnished from 4/4 to 12/4.

LECHE MARIA—See Santa Mario.

LEGA—See Kokko.

LEMONWOOD—See Degame and Piquia Peroba.

LEPCHA—See Hollock.

LETTERWOOD—See Snakewood.

LIFAKI—Commonly known as Sapele.

LIGNUM VITAE—*Guaiacum officinale,* Linn—*Guaiacum Sanctum,* Linn.

Known as Guayacan, Vera, Bera, Giac and Ironwood. A wood from the West Indies, Central, North and South America, which is one of the heaviest and hardest woods known—weight eighty-nine pounds per cubic foot or twice as heavy as American Birch. The color varies from almost black thru very dark green to dull brown with black stripes. It is too hard to cut for veneers, and with its excessive oil content does not glue well.

LIMBA—*Terminalia superba,* Eng. & Diels.

Also known as Afara, Frake, and Offram. The color varies from a pale yellow to a light brown. Flitch cost, 1/28″ quarter sliced, varies from 3c to 6c.

LIMEWOOD—See Basswood.

LINDEN—See Basswood.

LINGOA—See Padauk.

LINGUE—See Apa.

LISUMBA—See Olon.

LOCUST, BLACK—*Robinia pseudoacacia,* Linn.

Also called False Acacia and Yellow Locust. The principal range is in the Appalachian Mountains from Pennsylvania to northern Georgia. It is heavy and hard, and used for insulator pins, wagon hubs, etc. This tree produces a veneer that compares favorably with Amboyna Burl. The heartwood when cut is light greenish-yellow, but darkens to a dull greenish-brown upon exposure.

LOCUST, HONEY— *Gleditschia triacanthos,* L.

Eastern U. S. A. The sapwood is pale and the heartwood red or red-brown. It is hard, strong, coarse grained and durable in soil. It is widely cultivated as a shade tree.

LOCUST, SOUTH AMERICAN—See Guapinol.

LOCUST, WEST INDIAN—See Guapinol.

LOVEA—See Tigerwood.

LUMBAYAO—*Tarrietia javanica,* Blume.

From the Philippine Islands. This wood is frequently sold as Philippine Mahogany and resembles Tanguile in color.

MACACAUBA—See Macawood.

MACAWOOD—*Platymiscium, spp.*

Also called Macacahuba, Macacauba, Quira, Vencola, Granadillo, Bleeding Heart, Hormigo, Roble Colorado, and has been sold as Brazilian Padauk and also as False Rosewood. The wood from South America is a rich red or reddish-brown color with uniform or often light and darker veins. A very attractive wood for decorative work.

MACAYA—*Andira inermis,* H. B. K.

Also spelled Macayo, and is sometimes called Partridge Wood, Cabbage Bark and in British Honduras is Bitterwood. This wood from Central America is one of Mexico's potentially most valuable woods. It is coarse grained, hard, strong and durable and has a heavy, beautiful figure. The grain is similar to old English Oak, but the color is that of old Mahogany—the combination producing lumber and veneer that is adaptable for church interiors, paneling of large rooms, and massive, masculine furniture.

MADORO—*Not identified.*

It is reported that this wood comes from Brazil and belongs to the same family as Satinwood. Commercial supplies of veneer are available. The wood is a light brown or tan color with darker brown straight stripes and much of the wood shows a beeswing figure.

MADRONE BURL—*Arbutus Menziesii,* Pursh.

Also spelled Madrona or Madrono. Grows along the Pacific Coast from British Colombia into Mexico, growing best in large stands in the Redwood district of northwestern California. The heavy, tough wood is light pink with occasional spots of deep red. Its use as lumber is limited. Small quantities are cut into veneer to serve the place of Pearwood which it resembles. The beautiful burl, whose color and figure resemble Cherry, is usually sound and free from defects. Is used sometimes to replace Cherry.

MAGNOLIA—*Magnolia grandiflora,* Linn.

Evergreen Magnolia grows along the coast from North Carolina to Florida and westward in the Gulf Coast region to Texas and thru western Louisiana to southern Arkansas. The range of cucumber Magnolia—*M. acuminata,* extends from western New York to Alabama following the Appalachian Mountains, and westward to Illinois and Mississippi, appearing west of the Mississippi River in Arkansas. The wood of both trees resembles that of Yellow Poplar, but is heavier and harder, and often has a light to dark purplish color. Uses include furniture, planing mill products, etc. Veneer produced from the Whitewood of Magnolia logs is made into plywood and has been sold under the trade name of Ailon. It is not as hard as Birch, has mild grain markings in veneers and sands to a silky finish. Veneers are available, the quarter sliced without figure varying from 1½c to 2½c per foot and the figured quarter sliced from 3c to 4c.

MAHBAN—See Virola.

MAHOGANY—The name Mahogany in the past has been incorrectly added to many woods which are not true species of Mahogany, but the practice has, in general, been discontinued. The three authentic species listed below are all true Mahogany.

WEST INDIAN MAHOGANY—*Swietenia mahogani*, Jacq.

Grows in the West Indies and the tip of Florida. Principal supplies now come from Cuba, a little from San Domingo. The wood is closely grained, of a silky texture and extraordinarily beautiful color which, when newly sawn, is a yellowish-white but after exposure rapidly changes to a golden brown or a deep rich brown-red. The supply is limited, and hard to secure, but veneer or solid lumber 4/4 to 16/4 can be obtained. The heaviest and hardest of the Mahoganies. It is generally known as West Indian, Spanish or Cuban Mahogany but other trade names, according to the country of origin, are San Domingo, Porto Rico or Jamaica Mahogany.

TROPICAL AMERICAN MAHOGANY—*Swietenia macrophylla*, King.

Known in Mexico as Caoba and in Brazil as Aguano. Grows from southern Mexico to northern Colombia and Venezuela, and along the tributaries of the upper Amazon in Brazil and Peru. Principal supplies now come from Honduras, Mexico and the upper Amazon. Mexican, Tabasco, Honduras and Nicaraguan Mahogany are better known source names from this region. Other source names are Guatemalan, Costa Rica, Panama, Brazilian, Peruvian and Colombian Mahogany. The wood is straight grained, and when freshly sawn is yellowish-white or salmon pink, but after brief exposure changes as a rule to rich golden brown. Flitches are available in plain sliced or quarter striped, and medium to highly figured crotches. The principal source of Mahogany lumber is Mexico, British Honduras and the upper Amazon. Solid lumber from 4/4 to 16/4 is available.

AFRICAN MAHOGANY—*Khaya ivorensis*, A. Chev.

When this wood was first classified is was called *Swietenia senega'ensis*, Desrousseaux, but for geographical reasons the genus Swietenia was later divided with the name Swietenia carrying on for American species, and the name Khaya given to the African species. Most of the commercial African Mahogany is of Khaya ivorensis although there are at least a half dozen other species to be found in Africa. The wood is frequently named for the region from which the wood is obtained such as Senegal Mahogany, Gambia Mahogany, Benin Mahogany, etc. Commercial consignments are commonly classified according to the port of shipment or the district from which they are derived. Lagos and Benin (Nigeria); Axim, Half-Assinie, Accra and Takoradi (Gold Coast); Grand Bassam and Grand Lahou (Ivory Coast); Duala (French Cameroons); and Cape Lopez (Gaboon) are the principal places which give their names to African Mahogany. The color ranges from light pink thru bright red to red-brown. The wood is hard, works well and produces veneer of unusual lengths and widths. African Mahogany is highly figured. Most Mahogany veneers are of African origin. The prices of the flitches vary according to the thickness of veneer, grade and figure. Plain or figured lumber is available from 4/4 to 16/4.

Mahogany veneers are largely quarter sliced. The most common figures from this method of cutting are straight stripe, broken stripe, rope figure, mottle, bees-wing, block-mottle, fiddleback and innumerable variations and combinations of the above. Another outstanding figure in Mahogany is the crotch which is flat cut, the outer portions of the flitch yielding swirl and the central portion a full crotch figure. Currently there is a strong demand for flat cut Mahogany in plain leaf figure, figured flat cut and swirly flat cut. Blister figure and plum-pudding figure are rare in Mahogany. Sliced veneers are available from 1/100″ to 1/8″, and sawed stock from 1/20″ to 1/4″.

MAHOGANY, AUSTRALIAN—See Rose Mahogany.

MAHOGANY, BENIN—See African Mahogany.

MAHOGANY, BORNEO—See Seraya.

MAHOGANY, BRAZILIAN—The name Brazilian Mahogany has been used as a trade name for several different woods, but when correctly used it refers to Tropical American Mahogany. Andiroba and Jequitiba have been incorrectly called Brazilian Mahogany.

MAHOGANY, BRITISH GUIANA—See Andiroba.

MAHOGANY, BURMA—See Thitka.

Also known as Thitka. This wood from Burma is of a light brownish-yellow color, similar to Cuban Mahogany when first cut and seasons to a natural reddish-brown color. The grain is typically interlocked producing a narrow regular stripe or roe figure when quartered. Occasional logs show a beautiful broken roe and mottle. It is used for furniture and decorative paneling.

MAHOGANY, CHERRY—See Makore.

MAHOGANY, COLA—See Niangon.

MAHOGANY, COLOMBIAN—See Tropical American Mahogany. Jequitiba has been erroneously called Colombian Mahogany.

MAHOGANY, COSTA RICA—See Tropical American Mahogany.

MAHOGANY, CUBAN—See West Indian Mahogany.

MAHOGANY, DEMERARA—See Andiroba.

MAHOGANY, EAST INDIA—See Padauk and Seraya.

MAHOGANY, GUATAMALAN—See Tropical American Mahogany.

MAHOGANY, HONDURAS—See Tropical American Mahogany.

MAHOGANY, INDIAN WHITE—See Dhup.

MAHOGANY, JAMAICA—See West Indian Mahogany.

MAHOGANY, LAGOS—See African Mahogany.

MAHOGANY, MEXICAN—See Tropical American Mahogany.

MAHOGANY, MOUNTAIN—See Cercocarpus.
This North American wood is also called Cercocarpus. The wood is a bright clear red or a rich dark brown color with thin yellow sapwood. The cuttings are small.

MAHOGANY, NICARAGUAN—See Tropical American Mahogany.

MAHOGANY, NIGERIAN—See African Mahogany.

MAHOGANY, PANAMA—See Tropical American Mahogany.

MAHOGANY, PARA—See Andiroba.

MAHOGANY, PERUVIAN—See Tropical American Mahogany.

MAHOGANY, PHILIPPINE—See Philippine Hardwoods.

MAHOGANY, PINK—See Agba.

MAHOGANY, PORTO RICO—See West Indian Mahogany.

MAHOGANY, ROSE—*Dysoxylum fraseranum*, Bth.
Also known as Rosamay, Australian Mahogany or Australian Rosewood. From New South Wales and Queensland. The wood is of the Mahogany class, fine textured and very similar to Bosse. A rich reddish-brown Mahogany color, fragrant odor and works easily. It is used for fine cabinet work.

MAHOGANY, SAN DOMINGO—See West Indian Mahogany.

MAHOGANY, SPANISH—See West Indian Mahogany.

MAHOGANY, TABASCO—See Tropical American Mahogany.

MAHOGANY, TENASSERIM—See Padauk.

MAHOGANY, WHITE—See Prima Vera.

MAIDOU—*Pterocarpus pedatus*, Pierre.
Also called Madou and Mai Padu. Grows in French Indo-China. It has a satiny, ribbon stripe in shades of scarlet and pale straw color, and is often mistaken for Burmese Padauk. Limited quantities are to be had in the form of burls and crotches. Also resembles Amboyna so closely that they are used together. Flitch cost 1/28" half round varies from 25c to 35c.

MAIYANG—See Yang.

MAJAGUA—*Hibiscus spp.*
This hard textured wood from South America is greenish-gray in color with light and dark streaks.

MAKORE—*Mimusops heckelii*, Hutch. & Dalz.
Also spelled Makora or Makori and frequently called African Cherry, Cherry Mahogany or Baku. The tree is a native of the Gold Coast and Nigeria and produces a strikingly beautiful wood that is pink to pinkish-brown in color with some of the characteristics of African Mahogany, but the dark red growth lines are like Cherry.

MALABAR—See East Indian Rosewood.

MALUGAI—*Pometia pennata.*

From the Philippine Islands. Light red to reddish-brown in color, hard and heavy, grain straight, texture fine. Used for bending purposes where a strong, tough wood is required. Fairly large quantities available.

MAMEE APPLE—See Zapote Mamey.

MAMMEE APPLE, AFRICAN—*Ochrocarpus Africanus,* Oliv.

Also known as African Apple and African Apricot. This wood is from West Africa and is Mahogany brown, hard, fairly heavy, with rather coarse but even texture.

MANGGACHAPUI—*Hopea acuminata.*

From the Philippine Islands. Light yellow when cut, turning light orange or straw colored upon exposure; straight or slightly crossed grain with fine texture, hard and heavy. It is used for beams and joists, ship decking, planking, etc. Fairly abundant.

MANGGASINORO—*Shorea philippinensis.*

From the Philippine Islands. The wood is yellowish-white to pale brown, moderately hard and heavy, medium fine texture with grain crossed like almon and other white Lauans. It is used for furniture and interior work. Fairly abundant.

MANGROVE, BLACK—*Avicennia nitida,* Jacq.

Florida and Tropical America. The wood is a deep dark olive-green color with lighter stripes of a yellowish character, hard, strong, very heavy and rather coarse grained.

MANGROVE, WHITE—*Laguncu laria racemosa,* Gaert.

Also called Buttonwood, grown widely in Florida and Tropical America. The heartwood is a yellow-brown streaked with a darker shade, and the sapwood is lighter colored. It is heavy, hard, strong and close grained.

MANSONIA—*Mansonia altissima,* A. Chev.

Also called Ofun, Opruno and Aprono. This wood from the West Coast of Africa is used as a good substitute for American Walnut where very long lengths are required. It is similar to Walnut in both the heartwood and the sapwood, and is available in flitches showing a plain sliced or quartered stripe.

MAPLE, AUSTRALIAN—*Flindersia brayleyana,* F. v.M.—*Flindersia chatawaiana,* Bailey.

Also called Queensland Maple, Maple Silkwood, Warri and Red Beech. Australia produces this Maple similar in color and texture, in some respects, to African Mahogany. The grain is varied, sometimes with interlocked fibres, at others wavy or curly, so stripe or roey figure, fiddle-back or rams horn, and bird's-eye may all be met with. When quarter sliced it produces a fine, even, close-grained wood both striped and figured. Butts and crotches are highly figured and produce beautiful veneer.

MAPLE, BIRDSEYE—*Acer saccharum,* Marsh.

See Hard Maple. Bird's-eye grain is most commonly found in Sugar Maple, but is an irregular and rather rare occurrence. It may be found in one tree and not in another adjoining one. Sometimes it is scattered over the entire tree and sometimes the bird's-eye markings may be confined to only one side of the trunk or to irregular strips and patches. The theory has been advanced that these markings are caused by adventitious buds, but there is no entirely satisfactory explanation. Rotary cut veneers, 1/28″ thick are available, the flitch cost varying from 5c to 15c.

MAPLE, HARD.

SUGAR MAPLE—*Acer saccharum,* Marsh.

Found principally in the lake states, the northwest and in the Appalachians. Also called Rock Maple.

BLACK MAPLE—*Acer nigrum,* Michaux.

Found principally in the lake states, the northwest and in the Appalachians.
The heartwood of Hard Maple is light reddish-brown, and its sapwood white with a slightly reddish-brown tinge. The White Maple of commerce is the unstained sapwood of Sugar Maple. The wood is heavy, hard, strong and stiff with uniform texture. It is recommended where resistance to abrasion or indentation is required. The grain is usually straight, but beautiful veneers can be secured in bird's-eye, curly, blistered and quilted grain.

MAPLE, SOFT.

SILVER MAPLE—*Acer saccharinum,* Linn.

Also called Swamp Maple, Water Maple or Scarlet Maple.

RED MAPLE—*Acer rubrum,* Linn.

Also called Water Maple or River Maple.

OREGON MAPLE—*Acer macrophyllum,* Pursh.

Also called Big Leaf Maple.

Silver and Red Maple grow in the eastern half of the United States. Oregon Maple grows along the Pacific Coast from San Diego County, California, to Alaska. All soft Maple is lighter in color, and not so heavy, hard, or strong as Hard Maple. Some Oregon Maple trees produce fine specimens of quilted veneer.

MAPLE SILKWOOD—See Australian Maple.

MARACAIBO-WOOD—See Vera-Wood.

MARBLEWOOD—See Macassar Ebony.

MARMALADE TREE—See Zapote Mamey.

MARNUT—*Dalbergia, spp.*

This wood from Brazil has not been definitely classified but is either a *Dalbergia* or a *Machaerium.* The wood is rich violet-brown and is streaked with varying lighter and darker markings of golden yellow. It is lustrous and works to a smooth surface. It resembles Sissoo and looks very much like some shipments of Kingwood. It is used for cabinet work, veneered panels and doors. Veneers, 1/28″ sliced are available. Limited quantities of lumber 4/4 to 8/4 can be secured.

MARUPA—*Simaruba glauca,* D. C.

Also called Simaruba, Maruba, Negrito and in Florida is known as Bitterwood or the Paradise tree. The wood is lustrous white, yellowish or slightly brownish, light and soft. Easy to work, not strong, not durable and bitter. The tree grows in Central and South America and Florida.

MASSARANDUBA—See Bulletwood.

MAYAPIS—*Shorea palosapis,* Merr.

From the Philippine Islands. This tree produces a mild timber intermediate in color between the red and white Lauans, the darker color frequently being marketed as Tanguile while the lighter color is sold as White Lauan. The distinction between Mayapis and Palosapis is not clear.

MAYFLOWER TREE—See Roble.

M'BONDA—See Niove.

MBUKULU—See African Crabwood.

MELICA—See Southland Beech.

MERANTI—See Philippine Mahogany.

MERSAWA—See Palosapis.

MIHATICO AMARELLO—See Vinhatico.

MOABI—*Mimusops Djave,* Engl.

This is known as Adza and Orere in Gaboon, as Moabi in the Cameroons, as Djave Nut in Nigeria, as Dimpampi in Belgian Congo. The sapwood is pale and the heartwood is light reddish brown. The wood is hard, fairly heavy, is durable, and is easy to work.

MOBORON—See Agba.

MOCHA—*Andira jamaicensis* (W. Wr.) Urb.

Also called Moca, Moca Blanco and Moca Colorado. From Central America. Burls are frequent and Mocha Burl veneer is available in commercial quantities, cut half round. The background is a light yellow-brown color with the burl showing in large eyes averaging about 1″ in diameter in a darker brown color. It is a beautiful wood producing striking effects.

MONKEY PUZZLE—See Araricaria.

MORADO—See Amaranth.

MOLONKOTO—See African Crabwood.

MORTON BAY CHESTNUT—See Blackbean.

MOVINGUI—*Distemonanthus benthamianus,* Baill.

Also spelled Movinga or Movingue, and sometimes known as Ayan, Anyaran or Nigerian Satinwood. This wood from West Africa has a light yellow background much like Satinwood with a more open grain, and the pores showing clearly. Veneers show a fine figure or broken roe with adjacent layers marked by lighter and darker colored rings. Flitch cost, 1/28″ thick, varies from 5c to 15c.

MULBERRY, AFRICAN—See Iroko.

MULGA—*Acacia aneura,* F. v. M.

From Western Australia, Central and South Africa. The wood is reddish-brown with a very bright yellow sapwood, hard, close-grained and heavy. It is a wood of extraordinary grain and when carved is almost indistinguishable from marble.

MUIRACOATIARA—*Centrolobium paraense,* Tul.

This Brazilian wood has not been definitely classified due to the use of the same trade name for different woods. The wood is reported to present striking effects in both striped and mottled varieties and to be adaptable for paneling of rooms where variation in color is desired. It is probably one of the woods commercially known Goncalo Alves.

MUIRAPIRANGA—See Satinee.

MUNGUELLA—See Erimado.

MUNGUTSENDE—See Olon.

MURA—See Goncalo Alves.

MUTIRAL—See Ceylon Satinwood.

MUZAITA—See Camphorwood.

MYRTLE BURL—*Umbellularia californica* (H. and A.), Nuttall.

Known also as California Laurel or Baytree, Oregon Myrtle, Pepperwood, Pacific Myrtle, and the large cluster type of figure is often incorrectly called Acacia. Grows along the West Coast reaching its greatest size along the water courses of northwestern California. It is a hard, strong wood, golden brown and yellowish-green in color, a mixture of plain wood, mottle, stump and burl figure with a scattering of dark purple blotches. The matching requires expert handling. Half round flitches 1/28″ thick range in price from 5c to 25c.

MYRTLE, PACIFIC—See Myrtle Burl.

MYRTLE, TASMANIAN—*Nothofagus cunninghami,* Oerst.

Also known as Evergreen Beech or Tasmanian Beech. From Tasmania and Australia. The wood is a salmon-pink color with a close compact grain similar to Beech but slightly darker, and silver grain less prominent.

NACASTILLO—See Aromilla.

NAMBAR—See Cocobolo.

NANCHE—*Byrsonima crassifolia,* H. B. K.

Also spelled Nance and sometimes called Chi or Craboo. This South American wood resembles American Cherry but is lighter in weight and color. Used for furniture, and is available in lumber or veneers.

NARGUSTA—See Aromilla.

NARRA—*Pterocarpus indicus,* Willd.—*Pterocarpus echinatus.*

Also known as Sena and Angsena. This wood from the Dutch East Indies and the Philppines is closely related to Padauk. The Red Narra varies in color from deep red shadings to attractive rose tints, while the Yellow Narra ranges thru the brilliant browns to golden yellow. It is moderately heavy and hard, not very strong, fairly easy to work and takes a good polish. Said to be the most popular cabinet wood in the Philippines. Flitch cost 1/28″ thick varies from the plain at 3c to 8c up to highly figured at 10c to 20c including crotches.

NASEBERRY—See Zapota.

NEGRITO—See Marupa.

NGULU MAZA—See Opepe.

NIOVE—*Staudtia gabonensis,* Warb.

Also known as M'Bonda, Kamashi, Nkafi, and Susumenga. This is from French West Africa and has yellowish sapwood and a yellowish-brown to red brown heartwood. The wood has a fine texture, is durable and easy to work and takes an excellent polish.

NIANGON—*Tarrietia utilis*, Sprague.

Also known as Wismore, Wishmore, Ogoue, Nyankom, Cola Mahogany. This wood is from the Coastal Forests of the gold and ivory coasts and is very similar to African Mahogany but is coarser in texture and is denser. Hard to glue or finish because of its resinous nature.

NKAFI—See Niove.

NKALA—See Ozigo.

NOPO—*Cordia glabra*, L.

A light weight Mexican hardwood about the color of Walnut. Texture like Red Elm with long, tough fibres and an even grain. Available in solid lumber or veneers.

NOYER—French for Walnut.

NSOU—See Daniellia.

NTALA—See Tala.

NUNGO—See Olon.

NYANKOM—See Niangon.

NYSSA—Botanical name for Black Gum.

OAK, AFRICAN—See Iroko.

OAK, AMERICAN—All of the Oaks of commercial importance, about fifteen of the sixty or more native species, grow in the eastern half of the United States, especially in the Mississippi Valley and the South. The Oaks are commonly divided into two groups—Red Oak and White Oak.

WHITE OAK group:

Forked leaf White Oak—*Quercus alba*, Linn.

Bur Oak—*Quercus macrocarpa*, Michx.

Swamp White Oak—*Quercus bicolor*, Willd.

Post Oak—*Quercus stellata*, Wang.

Cow Oak—*Quercus prinus*, Linn., Basket Oak or Swamp Chestnut Oak.

Overcup Oak—*Quercus lyrata*, Walt.

Chestnut Oak—*Quercus montana*, Willd., Rock Chestnut Oak.

Chinquapin Oak—*Quercus muehlenbergii*, Engelm., Yellow Oak or Yellow Chestnut Oak.

RED OAK group:

Red Oak—*Quercus borealis*, Michx.—*Quercus borealis maxima* (Marsh.), Ashe.

Black Oak—*Quercus velutina*, LaMarck, Yellow Oak.

Texan Oak—*Quercus texana*, Buckl., Spotted Oak or Texas Red Oak.

Southern Red Oak—*Quercus rubra*, Linn., Spanish Oak.

Pin Oak—*Quercus palustris*, Muenchh.

Willow Oak—*Quercus phellos*, Linn.

Appalachian Oak comes from that mountainous area extending southwesterly from Pennsylvania to Georgia, covering the southern strip of Pennsylvania, southeastern Ohio, western Maryland, all of West Virginia, the eastern half of Kentucky and Tennessee, the western half of Virginia and North Carolina, and the extreme northern tip of Georgia. Appalachian White Oak is particularly suitable for fine architectural woodwork because of its beauty of grain and texture. It is available in plain, rift and quarter sawn lumber, and in veneer stock of all standard commercial thicknesses.

Southern Oak comes from the south, principally from the states of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, South Carolina, Tennessee and Texas.

Both Red and White Oak can be rotary cut, sliced or sawn. Rotary cut veneer has a pronounced grain figure; sliced or sawn veneers can be flat grain, quarter sawn, rift sawn or comb grain. Occasionally Oak is cut on the half round, or sometimes cut with a staylog to produce certain grain effects.

Heartwood lumber of the White Oak group is grayish brown in color, occasionally with a reddish tinge; that of the Red Oak group usually has a reddish tinge, although sometimes it resembles the White Oak in color. Generally on plain sawn surfaces the ends of the medullary rays are longer in White Oak than in Red Oak.

OAK, AUSTRALIAN SILKY—See Lacewood.

OAK, AUSTRIAN—See European Oak.

OAK, CHILEAN—See Southland Beech.

OAK, ENGLISH BROWN—*Quercus robur*, L. Q.—*Quercus sessiliflora*, Salisb.

Often called Pollard Oak or European Oak. This English wood is unquestionably one of the finest woods in use today. The wood varies from light tan to a deep leathery brown with black spots, sometimes creating an effect much like tortoise shell. The veneer is quarter sliced or sawn in all thicknesses from 1/32″ to 1/4″ Lumber can be secured from 4/4 to 16/4. English Oak burls and swirls produce magnificent veneers, but are very difficult to slice or half round, and due to their fragility and excessive waste are very expensive when perfectly matched into a face veneer. 1/28″ flitches cost from 10c to 35c, and are available either sliced or sawn.

OAK, EUROPEAN—*Quercus robur*, L. Q.—*Quercus sessiliflora*, Salisb.

European Oak is the trade name given Oak from various countries, all botanically the same as English Brown Oak but usually much lighter in color. Variations in color are due to differences in climate and soil. The wood is generally named from its origin, and is known as Russian, German, Hungarian, French or Austrian Oak.

OAK, FRENCH—See European Oak.

OAK, GERMAN—See European Oak.

OAK, GOTHIC.

Gothic Oak is a wood prepared to meet the demand for Old English Brown Oak at a reasonable cost. This rich, seasoned brown is more than a surface color. It is the natural tone of the wood itself, and penetrates to the full depth of any dimension. The solid lumber is available in any quantity, from 3/4 to 8/4, and can be machined, turned, carved or glued. Sawn veneers are produced from 1/20″ to 1/4″ thick, the price varying according to thickness. It is used in Colonial or earlier English designs.

OAK, HUNGARIAN—See European Oak.

OAK, POLLARD—See English Brown Oak.

OAK, QUEENSLAND SILKY—See Lacewood.

OAK, RUSSIAN—*Quercus robur*, L. Q.

Russian Oak is botanically the same as English Oak, but somewhat lighter in color due to differences in climate and soil. There are also other varieties of the same wood from different countries known as German, Hungarian, French or Austrian Oak.

OAK, SLAVONIAN—*Quercus robur*, L. Q.—*Quercus sessiliflora*, Salisb.

Slavonian Oak is botanically the same as English Brown Oak, but always is lighter in color due to the differences in climate and soil. Slavonian quartered White Oak is used frequently for its uniform color, texture and grain. The heartwood is a delicate tan shade, and the quartered flakes medium in size and prominent.

OAK, TASMANIAN—See Yuba.

OBA SULUK—See Seraya.

OBECHE—See Ayous.

OBOBO—See Bosse.

OBOBONERKHUI—See Bosse.

ODOKO—*Scottellia coriacea*, A. Chev.

Nigeria reports large quantities of this wood are available for export. The sapwood and heartwood are white to pale yellow throughout, straight grain, uniform texture and in weight and strength compare with Beech and Oak. It can be used for general construction work.

ODOUM—See Iroko and Ceiba.

OFFRAM—See Limba.

OFUN—See Mansonia.

OGECHI—See Capomo.

OGOUE—See Niangon.

OHIA—See Celtis.

OITY—*Moquilea tomentosa*, Benth.

From Brazil. The wood is a lustrous red-brown, with close grain, hard and capable of a smooth finish. It has the general characteristics of Satinee for which it would make a good substitute.

OJOCHE—See Capomo.

OKAN—*Cylicodiscus gabunensis*, Harms.

This wood is known on the Gold Coast as Denya and is being produced in commercial quantities. The Nigerian Forestry Department reports this wood available in vast quantities in the Southern forest regions of Nigeria. It is described as having about 75% heartwood which is a striking golden color often showing a slight greenish tinge, but on exposure gradually tones down to a dark reddish-brown. The wood is heavy, uniformly coarse in texture and with moderate to brilliant lustre, interlocked grain showing a well marked ribbon grain figure. It is recommended for block flooring and general construction work.

OKOTO—See African Crabwood.

OKOUME—*Aucoumea klaineana*, Pierre.

Also called Okume, Gaboon and sometimes incorrectly called Gaboon Mahogany although it is not related to Mahogany in any way. The wood from the west coast of Africa is a light reddish-brown color with dark, broken stripes, and a lustrous sheen, soft and light in weight, yet strong. Except for odor it is somewhat like Spanish Cedar. Quarter sliced 1/28″ thick the flitch cost is 3c to 8c with Okoume crotch from 8c to 15c.

OKPO—See Ayous.

OKWEN—See Bubinga.

OLELA—See Erimado.

OLENGUE—See Daniellia.

OLEO PARDO—See Cabreuva.

OLEO VERMELHO—See Cabreuva.

OLIVE, ITALIAN—*Olea europaea*, Linn.

Grows in southern Europe, principally in Italy. The Olive belongs to the same family as Ash, and somewhat resembles a Willow tree. It is a slow growing, close grained wood, hard and heavy, with dark brown pigment lines that streak yellowish-brown backgrounds. The flitches are striped 1/24″ thick, and range in price from 10c to 20c. A limited quantity of Italian Olive Ash burl veneer can be secured. Some has nothing but true burl figure, some nothing but swirl, and some a combination of both figures in fantastic patterns.

OLIVEWOOD—*Fraxinus, spp.*

The trade name Olivewood is given to American grown black Ash veneer cut on the quarter. The heartwood is a light brown color, and quarter sliced the darker brown growth lines show in narrow straight stripes.

OLOKO—See Iroko.

OLON—*Fagara macophylla*—Engl.

This wood is known as Bongo in the Cameroons, as Nungo in Gaboon, and as Mungutsende, Lisumba, and Kimpanga in Belgian Congo. The sapwood is yellowish white and the heartwood is almost saffron yellow and is sometimes veined or mottled. The wood is hard, heavy and durable.

OPEPE—*Sarcocephalus diderrichii*, De Wild.

Also called Abiache, Ubulu, Ekusawa, Kussia, Ngulu Maza, Kusiaba, Akondoc, Aloma, Bonkangu, Bonkese, Gulu, Kantate, and Badi. From Southern Nigeria and the Gold Coast. The sapwood is white or grey with red sap which gives it a pink appearance. The heartwood is orange to golden yellow and often figured. It darkens slightly upon exposure. The most striking feature is the distinctive uniform lustrous golden surface when flat sawn, while the quarter-sawn wood shows a beautiful ribbon stripe.

OPRUNO—See Mansonia.

ORANGE—*Citrus sinensis*, Osb.

From Honduras. The wood is light yellow color, heavy, hard and strong. It is marketed in the form of small irregular logs and is used for manicure sticks, small turnings, carvings and novelties.

ORELHA de MACACO—See Vinhatico.

ORERE—See Moabi.

ORHAMWOOD—A corruption of the French name for Elm "Orme."

ORIENTAL WOOD—*Endiandra Palmerstoni*, C. T. White.

Formerly known as Australian Laurel, Australian Walnut, Oriental Walnut, Queensland Walnut and Oriental although it is not a Walnut but belongs to the Laurel family. This Australian wood varies in color from brown to gray, frequently with vivid pink streaks and an all-over pinkish cast. The wood is quartered to emphasize its straight black stripes and some logs have a large block-mottle figure. Wide widths and long lengths are common. Flitch cost 1/28″ quarter sliced varies from 2c to 10c. Solid lumber 4/4 is available.

ORION—See Guijo.

ORME—French for Elm.

ORO—*Pahudia rhomboidea* (blco.), Prain.

Also known as Tindalo. This wood from the Philippine Islands is very hard, heavy and strong. It is used in solid lumber for interior finish, floors and tool handles, and is cut into veneers for panels, doors and musical instruments. The heartwood is pale orange when cut, turning to a deep rich wine color with age, sometimes with irregular blackish streaks. Flitch cost 1/28″ thick varies in plain sliced from 5c to 8c, and in highly figured from 10c to 15c.

OROKO—See Iroko.

OSOL—*Symphonia gabonensis*, Pierre. Also known as Agheribedi.

From Nigeria. The heartwood is a light orange brown, golden brown, pale brown or brownish-red color, straight grained and easy to work. It is used for general construction work.

OTONDO—See Emien.

OVAGA—*Panda oleosa*, Pierre.

From Gaboon, West Africa. The wood is whitish gray with grain and texture similar to Oak, but softer and the color whiter. It is used for veneers.

OWOWA—See Ayous.

OZIGO—*Pachylobus buttneri*, Engl. and Spp.

Also known as Assia, Nkala, Safunkala, and Tchidudimbu. This wood is from Gaboon and Belgian Congo and has a pale greyish brown color with a pronounced interlocking grain. It is fairly hard, easy to work but not very durable.

OZOUGA—See Tala.

PADAUK—The three species of Padauk, sometimes spelled Padouk, are known by many other names; Corail, Lingoa, Yomawood, Vermillion, Burmese Rosewood, Tenasserim Mahogany and East Indian Mahogany, although they are not true Mahoganies but close relatives of the Rosewoods. Padauk burls are sold under the names Maidon, Mai Padu and Madou. Nigeria produces three species of Camwood or Barwood that are often sold as African Padauk.

AFRICAN PADAUK—*Pterocarpus soyauxii*, Taub.

This wood from the west coast of Africa is close grained, and is usually quarter sliced. The sapwood is usually removed, leaving only the heartwood which is beautifully marked with deep golden red and brilliant red shades blending into a uniform veneer with dark figure streaks.

ANDAMAN PADAUK—*Pterocarpus dalbergioides*, Roxb.

The deep red of this wood from the Andaman Islands blends into shades of brown, and suggests why it is sometimes called Andaman Redwood. The gorgeous coloring rivals Amboyna with backgrounds of straw color and varying shades of pink accentuated by brilliant straks of red and red-brown.

BURMA PADAUK—*Pterocarpus macrocarpus*, Kurz.

This wood from Burma has a close texture with interlocked grain which shows as a beautiful cross-figure when quarter sliced. The colors are less brilliant than the African or Andaman species, ranging from yellow or golden reddish hues to dark dull reds with darker brown crossbands.

All three Padauks are in the same price range, the 1/28″ quarter sliced flitches varying in the plain figures from 5c to 8c with the highly figured from 10c to 15c. Solid lumber 4/4 to 8/4 can be secured.

PADOUK, BRAZILIAN—See Macawood.

PAGATPAT—*Sonneratia caseolaris*, Engl.

From the Pilippines. A light brown to dark chocolate wood with the heartwood almost black, hard and heavy with fine texture. Generally used for ship bridge and wharf building, but could be used for furniture or cabinet wood. It rusts out small nails due to salt content. Fairly abundant.

PAHUTAN—*Mangifera altissima,* Blco.

From the Philippine Islands. The sapwood is grayish, and the heartwood is dark coffee brown with alternating light and dark bands. The wood is scarce, but can be used for furniture and cabinet work or general construction.

PALDAO—*Dracontomelum dao,* Merr. & Rolfe.

The Dao tree grows in the Philippine Islands, Indo-China, and on the East Indian Archipelago. This wood possesses a great variety of grain effects, unusual figure, and a considerable range of color, from gray to a reddish-brown. Some grain markings resemble striped Walnut or Zebrawood, while others carry the irregular markings of Circassian Walnut. The flitch cost 1/28″ thick for plain to medium figure is 3c to 6c, with the highly figured varying from 8c to 20c.

PALISANDER—See Brazilian Rosewood.

PALISSANDRE—French for Rosewood.

PALO BLANCO—The trade name Palo Blanco is given to woods from a number of different trees in Central and South America; Marupa, Roble and others. See Prima Vera.

PALO MARIA—See Santa Maria.

PALO MORADO—See Amaranth.

PALO MULLATTO—See Goncalo Alves.

PALOSAPIS—*Anisoptera thurifera,* Blume.

Also known as Bella Rosa, Mersawa, Mayapis and rotary veneers are marketed as Duali and quarter sliced veneers as Bayott. This wood from the Philippine Islands and British Malaya is pale yellow with a slightly pinkish cast, moderately hard and heavy, coarse texture and grain slightly crossed, similar to Apitong. Suitable for cheaper furniture and interior finish. Flitch cost 1/28″ quarter sliced varies from 3c to 6c.

PANISAJ—See Hollock.

PAO (PAU) ROXO—See Amaranth.

PAPO—*Canarium schweinfurthii,* Engl.

Also called Elemi, Aiele and Canarium. This Nigerian wood has a whitish sapwood, while the heartwood is a light brown, tan or rose-brown, almost a pink Mahogany color, highly lustrous and satiny, resembling Okoume in appearance and character. Moderate supplies are available for use in furniture, doors, flooring and ornamental purposes.

PAQUE—*Ostrya guatemalensia,* Winkler.

Also called Guapaque. From Mexico. The wood is a brown color and is reported to be the equivalent of Hornbeam for strength and toughness.

PARANYA—*Not identified.*

This is a new wood, even textured and straight grained in a yellowish-green color, similar to yellow Poplar except for a pronounced ripple cross-fire.

PAROTA—See Kelobra.

PARTRIDGE WOOD—See Macaya.

PATAPSCO

Sometimes spelled Papapsco. For some reason which remains unexplained, this name is given to a particular form of figured Maple. The figure is a curly, wavy mottle with indications of blister but without any bird's-eye being apparent.

PAU AMARELLO—See Brazilian Satinwood.

PAU BRAZIL—See Brazilwood.

PEARWOOD—*Pyrus communis,* Linn.

A native of the United States, Germany and France, with most of the veneer coming from France or Germany. The best grades have a firm toughness and fine close grain, almost-flesh-colored, a faint rosy pink on a paler background with light and dark shadings formed by a distinctive large mottle figure. Flitch cost 1/28″ thick varies from 3c to 10c. Solid lumber 4/4 can be secured.

PEARWOOD, NIGERIAN—See Bosse.

PECAN—*Hicoria pecan* (Marsh.), Britton, Pecan Hickory, Sweet Pecan.

Hicoria aquatica (Mich. F.), Britton, Walter Hickory, Bitter Pecan.

Hicoria cordiformis (Wang.), Britton, Bitternut Hickory.

Hicoria myristicae-formis (Mich. F.), Britton, Nutmeg Hickory.

Pecan is a native of the United States, growing naturally in the southern states bordering on the Mississippi River. The heartwood of Sweet Pecan is reddish brown in color with beautiful darker brown stripes. The sapwood varies from pale red to white. It can be stained and finished to resemble Walnut, to which it is related botanically. It is available in good quantities in veneers or solid lumber. The difficulties encountered in slicing Sweet Pecan have only recently been overcome, and this wood now promises to become a popular veneer for wainscoting and furniture. Sliced veneer 1/28″ thick is available in good quantities, the plain sliced ranging from 2c to 3c and the quartered from 3c to 5c. Veneers thicker than 1/28″ must be sawn to order. Solid lumber is plentiful.

PENDA—*Xamthostemon oppositifolius.*

This Australian wood is fine textured and tight grained. The lumber is used for house framing and flooring under cover, principally dance floors. The veneer is cut from Red Penda and is an unusual shade of greyish brown with a chocolate brown stripe. Flitch cost 1/28″ thick varies from 2c to 3c.

PENKWA—See Aboudikrou.

PEPPERIDGE—See Black Gum.

PEPPERWOOD—See Myrtle Burl.

PEQUA—See Bosse.

PEQUIA—See Piquia Peroba.

PERNAMBUCO—See Brazilwood.

PEROBA, WHITE—*Paratecoma peroba,* Kuhl.

The Brazilian wood has been marketed under many confusing names, Peroba Branca, Peroba Amarella, Peroba Reseca and other names. Piquia Peroba is also confused with this wood. The wood is a pale golden olive color, close and fine in grain and not difficult to work, and is reported to be stronger than Teak. It is used in structural work and in decorative wainscoting. Veneers 1/28″ thick are available, sometimes showing a Satinwood type of mottled figure.

PEROBA, RED—*Aspidosperma polyneuron,* Muell, Arg.

Peroba is known as Brazil's favorite tree but the wood is known by many names that are confusing to the trade. It is called Peroba-Rosa, Palo Rosa, and other names. The wood is a pale rose color with darker streaks, suggesting the shading in the rosy cheek of a peach, but the color fades in strong light to brownish tones. It is used for flooring, fine furniture and decorative panelwoork. Veneers 1/28″ thick are available.

PERSIMMON—*Diospyrus virginiana,* L.

Eastern U. S. A. The tree grows 50 to 60 feet high and 16 to 20 inches in diametre or larger, and develops very slowly. The heartwood is dark brown and sometimes nearly black. It is used for golf clubs and shuttles.

PHILIPPINE HARDWOODS—

The Philippine Archipelago numbers over 7,000 islands, and produces many different trees. Many of these woods are sold under the broad, general term of Philippine Mahogany, although none are true Mahogany. The various woods range in color from a pale pinkish yellow to a dark reddish-brown so the term Philippine Mahogany does not produce a clear understanding of either color, strength or texture. In the U. S. A. an attempt has been made to clarify this by calling one group Light Red Philippine Mahogany and the other group Dark Red. The light red is generally produced from the trees of White Lauan, Almon and Bagtican. The dark red is produced from trees of Red Lauan and Tanguile. Many buyers specify the correct name of the wood to prevent errors.

The British Forest Products Research Laboratory classifies the woods from the Philippines, Malay Peninsula and Borneo, dividing them into (a) softer, lighter woods, (b) moderately hard, heavy timbers, (c) hardest, heaviest timbers. Woods marketed as Philippine Mahogany are generally from class (a), the softer, lighter woods, and in the Philippines are grouped under the name Lauan, in British Malay and Sarawak as Meranti, and in North Borneo as Seraya. The dark colored timbers of class (a) are Red Lauan, Tanguile (also called Bataan) Tiaong, Lumbayao, and the darker wood of Mayapsis, Red Meranti and Red Seraya. The lighter colored timbers of class (a) are White Lauan (Lamao), Almon Bagtican, Kalunti, and the lighter wood of Mayapis, White Meranti, and White Serava.

PICHO—*Tipuana lundellii,* Standl.

A Tropical American hardwood used for automobile body stock, construction material, hardwood flooring and furniture. It is heavy, tough and strong. The background is a reddish-brown tone with straight grain markings in dark brown and black.

PIMENTO—*Pimenta officinalis,* Lindl.

From the West Indies. The wood is of a dark to light salmon color, with a very firm, hard, close texture and a smooth surface. It is principally used for making canes.

PIN—French for Pine.

PINE, AFRICAN—See African Yellowwood.

PINE, BRAZILIAN—See Parana Pine.

PINE, BRITISH COLUMBIA—See Douglas Fir.

PINE, BUNYA—*Araucaria bidwillii*, Hook.
A Pine from Australia that is pinkish-cream in color with a beautiful figure. Also called Bunya Bunya. It is used for veneers and general purposes.

PINE, CHILEAN—(*Araucaria imbricata*) Pav.
This tree is a native of the Chilean Province of Arauco. The wood is pale yellowish and is fine-textured. It is used for construction work, flooring, doors, window sash and furniture. Mature trees reach a height of from 90 to 135 feet.

PINE, HAZEL—An export misnomer for Sap Gum.

PINE, HOOP—*Araucaria cunninghami*, Ait.
Also called Moreton Bay or Queensland Pine. From Australia. The wood is cream or ivory color, light, fairly soft, strong, non-odorous with close even texture. Used for cheap cabinetwork or plywood for painted surfaces.

PINE, IDAHO—See Western White Pine.

PINE, KAURI—*Agathis spp.*
Also known as Cowdie Pine, New Zealand Pine and South Queensland Kauri Pine. From Queensland and New Zealand. The heartwood is ayellow-white or straw color, moderately hard for Pine, strong, clean, fine, close and straight grained. It is used in boat construction for masts, decks and ship-joinery generally. The Queensland Kauri is lighter in weight and softer in grain than the New Zealand Kauri.

PINE, LODGEPOLE—*Pinus contorta*, Loudon.
Classed commercially as Yellow Pine, it grows throughout the Western part of the United States.

PINE, MORETON BAY—See Hoop Pine.

PINE, NORTHERN WHITE—*Pinus strobus*, Linn.
It grows principally in the Lake States, the northeastern states and the Appalachian region. The soft, uniform texture of the virgin growth makes it the finest of the White Pines. It is light in weight, soft, even-textured, and easily worked, dries easily, and does not shrink or swell greatly with changes in moisture content. It is probably the least resinous of all the Pines.

PINE, NORWAY—*Pinus resinosa*, Solander.
Norway Pine of the Lake States belongs to the Yellow Pine group. It is somewhat coarser than Northern White Pine in grain and texture, with more strongly marked annual rings, and it is somewhat resinous. Norway Pine is also known as Red Pine, Canadian Red Pine, and Hard Pine.

PINE, OREGON—See Douglas Fir.

PINE, PARANA—*Araucaria brasiliana*, Lamo.
The wood from Brazil is also called Brazilian Pine and reaches heights from 80 to 120 feet. The color is a warm yellowish-brown, with a closer and finer grain than ordinary Pine or Araucaria. Brazil exports more Parana Pine than any other wood.

PINE, PONDEROSA—*Pinus ponderosa*, Lawson.
It grows from Washington to the Black Hills and southward in the Rocky Fountains and Pacific Coast regions. This species of Western Pine is similar in so many respects to the White Pines that it is often referred to as White Pine. It is the lightest color of the Yellow Pines, and the most abundant of the Western Pines. Commercially it is known under several different names. In the Inland Empire it is sold as "Western Pine," "Western Soft" or "Ponderosa Pine." The term "California White Pine" can no longer be used legitimately.

PINE, QUEENSLAND—See Hoop Pine.

PINE, SCOTS—*Pinus sylvestris*, Linn.
From Great Britain and frequently called Yellow or Red Deal. The heartwood is reddish to yellowish with hard and soft grain, resinous. The sapwood is somewhat paler. It is used for general construction work.

PINE, SOUTHERN YELLOW—A general name for a number of closely related species.

LONGLEAF PINE—*Pinus palustris,* Miller, Pitch Pine.

SHORTLEAF PINE—*Pinus echinata,* Miller., Arkansas Soft Pine.

LOBLOLLY PINE—*Pinus taeda,* Linn., North Carolina Pine.

SLASH PINE—*Pinus caribaea,* Morelot.

POND PINE—*Pinus regida serotina* (Mich.), Loudon.

Southern Yellow Pine grows in the Atlantic and Gulf States from New Jersey to Texas and as far north as Pennsylvania, West Virginia, Kentucky and Missouri. The wide-ringed, lightweight, easily worked and soft southern Yellow Pine that is grown in the Atlantic Coastal Plain is known as North Carolina Pine, and wood from shortleaf stands in or near the Ozark Mountains is called Arkansas Soft Pine.

PINE, SUGAR—*Pinus lambertiana,* Douglas.

A native of California and southern Oregon. It is similar in appearance and properties to northern White Pine, but is lighter colored, changes color less on exposure, has more conspicuous resin ducts, and is slightly coarser textured.

PINE, WESTERN WHITE—*Pinus monticola,* D. Don.

Sold commercially as Idaho White Pine or Idaho Pine, it grows principally in Northern Idaho, Eastern Washington and Western Montana. It resembles Northern White Pine so closely that the clear wood of the tree is indistinguishable. Knotty Western White Pine is frequently specified on high-class Knotty Pine jobs.

PINHO—See Brazilian Pine.

PINKWOOD, BRAZILIAN—See Tulipwood.

PIQUIA PEROBA—*Aspidosperma tomentosum,* Mart.

The various names used to market this Brazilian wood are confused with red and white Peroba and Degame. The name Lemonwood has been used for this wood as well as Degame. Other names are Amarella Peroba, Pequia, and Guatambu. The wood is a strong, reddish-salmon color, interspersed with very dark plum-colored splashes, lustrous and capable of a smooth surface. It is used for general construction work, flooring, doors and furniture.

PLANE, AMERICAN—See American Sycamore.

PLANE, ORIENTAL—*Platanus orientalis,* L.

The Plane tree grows throughout Europe and produces a wood that varies from a very pale yellow to a light red or a greyish-hue and sometimes presents a variegated effect of a mixture of all these tints. It is used for cabinet work, furniture, doors and flooring.

PLUM, BLACK—See Jaman.

PODO—*Podocarpus, spp.*

Also called Musengera or Musangira. A softwood from East Africa, similar to Kauri Pine, but more liable to warp or twist. It is a bright yellow straw color with a firm grain and fairly even texture. It is used for general building work and plain furniture.

POLLARD OAK—See English Brown Oak.

POMELE

This trade name is given to small blister figure in Mahogany.

POON—*Calophyllum spp.*

From India, Burma and the Andaman Islands. Various species are marketed as Poon or Alexandrian Laurel. The wood is of a rather dark reddish-brown Mahogany color with wavy grain and a firm, close, compact texture. It is a decorative wood similar to tropical American Mahogany but having characteristics all its own. It is used for wainscoting, furniture and cabinet work. It possesses good strength properties and is used for masts and spars.

POPLAR, BALSAM—*Populus balsamifera,* Linnaeus.

Also known as Balsam, Balm of Gilead, Tacamahac, Baumier and incorrectly called Cottonwood and Poplar. It should not be confused with Yellow Poplar to which it bears no botanical relation. It grows principally in Alaska and Canada and extends along the Canadian border from Maine to Oregon. The heartwood is a light brown and the moderately thick sapwood is nearly white.

POPLAR, BAY—See Tupelo Gum.

POPLAR, SILVER—See Aspen.

POPLAR, YELLOW—*Liriodendron tulipifera*, Linn.

Commonly but incorrectly called Whitewood in certain sections of the United States and sometimes referred to as Canoewood or Tulip Tree, but it is not related to the Brazil Tulipwood. Yellow Poplar grows from central New England as far west as southern Michigan, south throughout the Appalachian hardwood producing region to the gulf and into the near southwest. Even textured and straight grained, its heartwood is pale, canary colored with a distinctly greenish cast. Its sapwood is white. It is available in lumber as well as in thin stock suitable for crossbandings and face veneers. Also it is a splendid wood for cores. Appalachian Yellow Poplar excels as a hardwood for painted and enameled woodwork because of its stability as well as its freedom from oils and resins which would affect the enamel finish.

POPULUS—*Populus tremuloides*, Michx., Trembling or quaking Aspen.
Populus grandidentata, Michx., Large tooth Aspen.

Popple is another name given to Aspen trees grown in the northern part of the United States. The trees are small and are used largely for paper pulp, cores for veneered work and matches. The broad sapwood is creamy white and the heartwood light brown. The wood is soft, weak, light in weight, uniform in texture and easily worked. Aspen for face veneers is described under Aspen.

PRIMA VERA—*Tabebuia Donnell-Smithii*, Rose.

This wood is from Guatemala, Salvador, Honduras and Southern Mexico. The color is yellowish white to light yellowish brown with a fairly high luster. The grain is straight and when quarter sliced will produce veneer running from straight stripe to highly figured. The veneer is also known as Palo Blanco, Blanco and White Mahogany.

PRINCEWOOD—See Canaletta.

PRINZWOOD—See American Elm.

PURPLEHEART—See Amaranth.

PYINKADO—*Xylia dolabriformis*, Benth.

Also spelled Pyingado and is known as the Ironwood of Burma. The wood is a reddish-brown color, hard, heavy, tough, very strong and rigid, with a sticky or oily feeling. It is used for railyway ties, paving blocks, boat building. No distinction is made in commercial use between this wood and Jamba.

PYINMA—*Lagerstroemia hypoleuca*, Kurz.

From Burma and the Andaman Islands. The wood varies from a light red-brown color to a darker and deeper tint with a lustrous sheen and sometimes is figured. The supply is very limited but it has been used for decorative wainscoting.

QUEENSLAND MAPLE—See Australian Maple.

QUEENSLAND SILKY OAK—See Lacewood.

QUIRA—See Macawood.

QUINA—See Cabreuva.

RABO LAGARTO—See Ruda.

RAMON—See Capomo.

RANGOON TEAK—See Teak.

RASPBERRY JAMWOOD—*Acacia acuminata*, Benth.

Native to Australia. The wood possesses a rich color varying from violet to crimson, with a very hard, close, lustrous grain. A valuable but little known wood.

RAULI—See Southland Beech.

RED BEECH—See Australian Maple.

REDWOOD—*Sequoia sempervirens* (Lam.), Endlicher.

This native of California was once known as Big Tree and in England is known as Sequoia. The Redwood lumber is used for shingles, conduits and things which require wood resistant to decay. Redwood burls from the base of the tree or from higher up are generally cut half round. This unusual burl ranges in color from light pink to deep red and sometimes to a cinnamon brown, with clusters of eyes of many forms. Burl flitch cost 1/28″ half round ranges from 5c to 20c.

REDWOOD, HONDURAS—*Erythroxylon affine*, A. Rich.

This Redwood comes from British Honduras. A red Mahogany-colored wood, so similar to the product of some of the African Mahoganies as to be indistinguishable.

REWA-REWA—See New Zealand Honeysuckle.

RIMU—*Dacrydium cupressinum*, Soland.

A softwood from New Zealand. The wood varies from pale yellow to Chestnut-brown, with some streaks of lighter and darker color, and is rather harder and firmer than Red Deal. It is used for flooring but would be suitable for cabinet work.

ROBLE—*Tabebuia pentaphylla* (L.) Hemsl.

Tropical American wood that is also called the Mayflower tree and Roble Blanco. The wood has a superficial resemblance to Oak although it does not have prominent rays. A grey-brown wood with a grain more like Mahogany than Oak. Small quantities of veneer are available, 1/4″ sawn, the flitch cost being about 25c per square foot.

ROBLE COLORADO—See Macawood.

ROKO—See Iroko.

ROSA—See Arariba.

ROSAMAY—See Rose Mahogany.

ROSA MORADA—*Lonchocarpus hondurensis*, Benth.

A Mexican and Central American wood recently introduced for commercial use as veneers. The veneer is a light pale Walnut shade, close grained with a fine sheen and luster and the quarters are more or less mottled. It is available in long, clear cuttings that run exceptionally free from defects.

ROSEWOOD, AFRICAN—See Bubinga.

ROSEWOOD, AUSTRALIAN—See Rose Mahogany.

ROSEWOOD, BAHIA—See Brazilian Rosewood.

ROSEWOOD, BOMBAY—See East Indian Rosewood.

ROSEWOOD, BRAZILIAN—*Dalbergia nigra*, Fr. Allem.

Also called Rio Rosewood, Jacaranda, Palisander, Bahia Rosewood or Cabiuna. It grows in Brazil from Rio de Janeiro east to Bahia. The color range varies from dark purple thru dull reds to tawny shades, with streaks of dark brown or black pigment lines. It is hard, heavy and strong. The veneer price ranges from plain at 5c to 10c, figured 10c to 20c, and butt from 10c to 25c. Lumber 4/4 to 5/4 can be secured. Timber exporters in Brazil describe the various colors available as follows: WHITE—an ochre shade with brownish spots; BLACK—heart black, brilliant with brownish spots; CABIUNA—heart black, sapwood yellow; PINK—reddish with darker spots; ROXO—dark pink with black grains; VIOLET—ochre with pink spots and grains; TA—brown with black grains.

ROSEWOOD, BURMESE—See Padauk.

ROSEWOOD, EAST INDIAN—*Dalbergia latifolia*, Roxb.

Also known as Blackwood, Malabar, Rosetta Rosewood, Bombay Rosewood and sometimes incorrectly called Shisham. This wood comes from East India. It varies tremendously in color from dark purple and almost Ebony black thru many shades of red into yellow. Quarter sliced 1/28″ thick the flitch cost varies from 5c to 15c with some crotches available at 10c to 25c. Lumber 4/4 to 5/4 can be secured.

ROSEWOOD, FRENCH—See Madagascar Rosewood.

ROSEWOOD, HONDURAS—*Dalbergia stevonsonii*, Standl.

From Central America, this wood is lighter in color than the Brazilian or East Indian growths. 1/28″ flitch cost from 5c to 8c half round.

ROSEWOOD, MADAGASCAR—*Dalbergia Greveana*, Baill.

Also known as Madagascar Palisander and French Rosewood, from the forests of Madagascar. The wood is very hard, dark to light rose-pink with pronounced lines of darker red shades. Quarter sliced 1/28″ thick, flitch cost varies from 5c to 15c.

ROSEWOOD, RIO—See Brazilian Rosewood.

ROSEWOOD, ROSETTA—See East Indian Rosewood.

RUDA—*Zanthoxylum, spp.*

This wood from Central America is called Rabo Lagarto in Mexico. The wood is reported to be a yellow and bluish color and to be similar in color and working qualities to Yellow Poplar, As far as known, commercial supplies are not yet available. This is probably the same wood as San Domingo Harewood.

SABA—See Dialyanthera.

SABICU—*Lysiloma sabicu,* Bth.

This wood from Central, South America and the West Indies is hard textured with a rich brown color for background with well figured darker brown stripes in mottle and plain stripe. Flitch cost, 1/28″ thick, varies from 3c to 6c.

SAFUNKALA—See Ozigo .

SAL—*Shorea robusta,* Gaert.

From India. This wood somewhat resembles Borneo Camphorwood, but is harder and heavier, and generally a light brown color.

SAMBOGUM—See Boarwood.

SAMBA-AYOUS—See Ayous.

SANGA—See Erimado.

SANGRE TORO—*Pterocarpus, spp.*

A Mexican wood, light in color with streaks of darker color, some almost green. It is very irregular in both figure and color.

SANTA MARIA—*Calophyllum brasiliense var rekoi,* Standl.

Also known as Palo Maria, Leche Maria or Bari. Santa Maria grows all through Central and South America. The wood is pinkish to brick red usually showing a dark striping. It is moderately hard and heavy weighing 43 to 46 pounds per cubic foot. The grain varies from straight to irregular, medium texture. Fairly easy to work and takes a smooth finish. Used for drawer bottoms.

SANTA VERA—Eucalyptus, spp.

California produces this wood, which is grown from one of the Australian Eucalyptus trees grown in southern California. Good commercial quantities of veneer are available and it makes a beautiful wood for decorative purposes. The background is a delicate pinkish-brown shade with lighter colored flakes and light brown ribbon stripes, and the highly figured logs produce a fine beeswing figure. Flitch costs, 1/28″ sliced, vary in plain cuts from 3c to 5c with the highly figured quarters ranging up to 15c. Lumber can be cut to order.

SAPELE—*Entandrophragma cylindricum,* Sprague.

Sometimes spelled Sapeli, this wood grows on the west coast of Africa. It is incorrectly called Sapele Mahogany, but it is not a true Mahogany. The sapwood is pale with a pinkish tint, while the heartwood is a light red when first cut, soon darkening to reddish-brown on exposure. Quartered veneers show typically a narrow stripe figure. Sapele has a very distinct formation of narrow stripes that is probably more pronounced in this wood than in any other species. The reddish-brown stripes on the lighter red background are generally very straight and uniform in size, and appear to be ruled in regular rows from one end of the veneer sheet to the other end. Flitch cost, 1/28″ thick quarter sliced, varies from 3c to 5c.

SAPELE, IVORY COAST—See Aboudikrou.

SAPODILLA—See Zapota.

SAPOTE—See Zapote Mamey.

SASSAFRAS—*S. Albidum* (Nutt.) nees.

From eastern and south eastern United States. The wood is pale brown and has the general appearance of Ash or Chestnut.

SASSANDRA—See Aboudikrou.

SATINE RUBANNE—See Satinee.

SATINA—See Brazilian Satinwood.

SATINEE—*Brosimum paraense,* Huber.

This wood from South America is also known as Satine Rubanne, Satina, Muirapiranga, and many other names. The wood is of a bright, rich red color somewhat resembling the color of Cuban Mahogany. It has a medium texture, is not very difficult to work, and takes a very good polish. Flitch cost, 1/20″ flat cut, varies from 3c to 5c.

SATINET—*Betula Lutea,* Michx. F.

This is a registered trade mark of a Canadian veneer manufacturer for veneer cut from Curly Figured Birch.

SATINWOOD, BRAZILIAN—*Euxylophora paraensis,* Huber.

Also known as Pau Amarello and Satina, it is imported from Brazil as a substitute for Ceylon or San Domingan Satinwood. It is a bright, rich, warm golden yellow color, hard in texture, and comes in good widths and lengths. The grain is coarser than Ceylon Satinwood and the figure and mottle are lacking. Lumber 4/4 to 8/4 can be secured.

SATINWOOD, CEYLON—*Chloroxylon swietenia*, D. C.

This is probably the finest of the present-day Satinwoods. Also known as East Indian Satinwood, Buruta, Mutirai or Flowered Satinwood, it is grown in southern India and Ceylon. The wood is hard, takes a fine finish and is one of the finest furniture woods, pale golden color with ripples of light across the surface. Flitches are available in straight stripe, broken stripe, mottle and beeswing figure, the cost varying from 5c to 25c. Solid lumber 4/4 to 5/4 is available.

SATINWOOD, CONCHA—See San Domingo Harewood.

SATINWOOD, EAST INDIAN—See Ceylon Satinwood.

SATINWOOD, NIGERIAN—See Movingui.

SATINWOOD, SAN DOMINGAN—*Zanthoxylum flavum*, Vahl.

Very commonly called West Indian Satinwood. The Satinwood from Porto Rico was considered the finest in the world but the supply is exhausted. British Honduras produces several species of *Zanthoxylum* in fairly good quantities, all of them being lustrous yellow Satinwoods. The wood is always a bright golden color, sometimes referred to as molten gold. Veneers are available, 1/28″ thick, the flitch cost varying with the amount of figure from 5c to 20c. Lumber 4/4 to 8/4 can be secured.

SATINWOOD, WEST INDIAN—See San Domingan Satinwood.

SAVIN—See Aromatic Red Cedar.

SELANO—See Lacewood.

SENEGAL MAHOGANY—See African Mahogany.

SENA—See Narra.

SERAYA—*Shorea spp.*

Also spelled Serayah or Seriah. The product of this tree has been imported from the Malay Peninsula, Borneo and Singapore and has been incorrectly called East Indian or Borneo Mahogany, East Indian or Borneo Cedar and locally Oba Suluk, or Klapak. Red Seraya is similar to Almon, White Seraya is similar to Bagtikan, and Oba Suluk is similar to Tanguile. See Philippine Mahogany.

SEQUOIA—See Redwood.

SHISHAM—See East Indian Rosewood and Sissoo.

SHITTUM WOOD—*Acacia seyal.*

This Biblical wood was used for the "Ark of the Covenant" as well as the furniture of the tabernacle.

SIDA—See Tigerwood.

SILK COTTON TREE—See Ceiba.

SILKYWOOD—See Canadian Silkywood.

SILKY OAK—See Lacewood.

SIMARUBA—See Marupa.

SINDROU—See Ako.

SINDRU—See Emien.

SINGA—See Daniellia.

SINORA—See Manggasinora.

This wood is from the Philippine Islands and is light yellow. It has a coarse texture and is cross grained. Also known as Yellow Lauan and as Manggasinora.

SIPO—See Aboudikrou.

SISSOO—*Dalbergia sissoo*, Roxb.

This wood from India is hard textured, the background of the veneer is a rich warm brown and it has a pleasing stripe and mottle figure, produced by the golden or deeper brown streaks. The native princes in India possess carvings of Sissoo that are remarkable for their delicate and intricate lines and the depth of the cuts. It is often called the Shisham wood of British India.

SMOKE TREE—See Chittam wood.

SNAKEWOOD—*Piratinera guianensis,* Aubl.

Also called Letterwood and Leopard wood. A native of British Guiana and British Honduras, this wood is a warm reddish-brown streaked with black lines, very hard and heavy. Largely used in the manufacture of walking canes, etc., but sometimes uesd for inlay work. Flitch cost 1/24″ sawn 20c to 35c.

SNAKEWOOD, SURINAM—See Hoobooballi.

SOLERA—See Canaletta.

SONORA—See Manggasinoro.

SPRUCE, EASTERN

RED—*Picea rubra,* Link.

BLACK—*Picea mariana* (Miller), Britton.

Black Spruce grows in the lake states and New England, and Red Spruce in New England and the Appalachian Mountains. The wood is light in color, and there is little difference between the heartwood and sapwood. It is used for framing material, boxes and crates.

SPRUCE, EUROPEAN—*Picea excelsa,* Link.

This timber, if imported from the Baltic, is called White Fir, White Deal, or Norway Spruce, but if from Canada is called Yellow Spruce. The wood is white, straight and even grained, tough, elastic and light. The Baltic Spruce is milder and easier to work. It is used for interior construction work.

SPRUCE, NORWAY—See European Spruce.

SPRUCE, SITKA—*Picea sitchensis* (Bongard), Carriere.

Also called Western Spruce, Yellow Spruce, Tide-land Spruce, and Sequoia Silver Spruce. It grows in a narrow strip along the Pacific Coast from Alaska to northern California. The wood is light in weight, and ranks high in strength for its weight, and can be obtained in clear, straight grained pieces of large size and uniform texture. It is the favored wood for airplaines, and is also used for boxes, ladders, and piano sounding boards.

SPRUCE, WHITE—*Picea glauca* (Moench), Voss.

This wood is commonly known to the trade as Canadian, Eastern or Adirondack Spruce, and is also known in the Hudson Bay district as Pine, Bog Spruce, Skunk Spruce, Cat Spruce, Blue Spruce and Double Spruce. It grows over a wide area from Labrador to Hudson Bay, through Alaska to the Great Lakes region and the states adjoining Canada to the east. The wood of White Spruce is ranked as easy to kiln dry, good in ability to stay in place, very easy to glue, and for these reasons makes a fine core material for veneered doors. It is related botanically to Sitka Spruce which is used in airplane construction. The heartwood and the sapwood are practically white and are not readily distinguishable when dry.

SPRUCE, YELLOW—See European Spruce.

STINKING TOES—See Cana Fistola.

SUBAHA—See Abura.

SUCUPIRA—*Bowdichia spp.*

Also called Amoteak, Amotique, Hudoke, Brownheart, and in Brazil Sucupira Amarella. Acapu is another name used in Brazil for wood that is probably this same species. This tree, a native of Brazil, produces veneer that has a light tannish-brown background with darker brown narrow stripes, and a fairly open, uniform grain. The wood is heavy, hard, dense, tough texture, coarse and harsh. In its unusual blend of colors, it is much like old English weathered or fumed Oak. It lends itself to treatments in Gothic period, especially for church work. Flitch cost, 1/28″ quarter sliced, varies from 2c to 4c, lumber 4/4 to 16/4 is available in limited quantities. Veneer logs imported from Brazil seldom produce clear cuttings over 6 or 7 feet long and the supply is limited.

SUGARBERRY—See Hackberry.

SUNLOCH—See Hollock.

SUN RAY or SUN RISE—Trade name for dark Prima Vera.

SUPA—*Sindora supa.*

From the Philippine Islands. The wood is pale yellow when cut and turns to light yellowish brown with age, very hard and heavy. Suitable for high grade cabinet and interior work, but is used largely for flooring. Small quantities available.

SUSUMENGA—See Niove.

SWEET BAY—See Laurel.

SYCAMORE, AMERICAN—*Platanus occidentalis*, Linn.

Also called Buttonwood, Buttonball and American Plane tree. It grows from Maine to the central west, and almost to the Gulf. When quartered this fairly hard, pale reddish-brown wood develops small flakes more numerous than those in quartered Oak. Flitch cost 1/28″ quarter sliced from 2c to 4c.

SYCAMORE, ENGLISH—See Harewood.

SYCOMORE—French for Sycamore.

TABASARA—See Cativo.

TACAMAHAC—See Balsam Poplar.

TACHUELILLA—*Zanthoxylum microcarpum*, Griseb.

This Mexican wood somewhat resembles American Poplar with a beautiful satiny finish and works easily. Used for furniture, interiors, etc., and is available in lumber and veneers.

TAKU—*Not identified.*

This wood from South America has a hard texture, deep lavender-grey brown background with stripe and mottle figure.

TALA—*Saccoglottis gabonensis*, Urban.

Also known as Ozouga, Atala, Ntala, Akouapo, Bidou, Tssoua. This wood is from the West Coast of Africa and is medium brown in color and is a very hard and heavy wood.

TAMARACK—*Larix laricina* (Du Roi), Koch.

From North America. Tamarack is of the Larch family. It is heavy, strong, stiff, and resinous. Most Tamarack is utilized in the form of poles, posts, ties, and mine props.

TAMO—*Fraxinus sieboldiana*, Blume.

Also known as Japanese Ash or Damo. Genuine Tamo imported from Japan is varied in color from brownish-tan thru gray to almost white, and the figure is varied even in adjacent pieces when cut 1/28″ thick. Sometimes the figure looks like a peanut shell, and some runs to swirls or fiddle-back. Very plain Tamo can be secured from 3c to 8c, while the highly figured costs from 10c to 30c.

TANGARA—*Not identified.*

This wood looks something like Faux Satine or Aspen Crotch.

TANGUILE—*Shorea polysperma*, Merr.

Also spelled Tangile, a native of the Philippines and sometimes called Bataan. The heartwood varies from pale to dark reddish-brown with a decided purplish tinge. The sapwood is very pale greyish or reddish-brown. The grain is crossed, producing a conspicuous ribbon figure when quartered. Large quantities are available for high-grade furniture and cabinet work. Tiaong is very similar to Tanguile and is often sold under that name.

TARTAN, ROYAL—*Tarrietia argyrodendron*, Benth.

The tree is known in Australia as Crowsfoot Elm and is native to the north coast of New South Wales and the south coast of Queensland. The wood is a brick-red Mahogany color, with a smooth fine grain, pores irregularly placed, and when quartered shows a pattern of small flecks crossed by wavy, thin lines. It is used for fine decorative work. Flitch cost, 1/28″ quarter sliced, varies from 2c to 6c. Solid lumber, 4/4, is available.

TCHIDUDIMBU—See Ozigo.

TEAK, AFRICAN—See Iroko.

TEAK—*Tectona grandis*, L. F.

This wood from Burma is generally shipped from the port of Rangoon, and is sometimes known as Rangoon Teak. Teak also comes from Java, the East Indies, Siam, French Indo China, and has been planted successfully in the Philippines. This strong, tough wood ranges in color from light tawny yellow to dark brown, slightly oily. The Teak from Java is lighter in color with a silky appearance, mottled and some pronounced fiddle-back figure. Flat cut 1/28″ thick, the flitch cost varies from 3c to 15c. Well balanced stocks of lumber are carried in the U. S. A. in thicknesses from 4/4 to 24/4.

TEAK, RHODESIAN—*Baikiaea plurijuga*, Harms.

North and South Rhodesia. Deep reddish-brown color with fine, even grain.

TEAK, SURINAM—See Guapinol.

TEPESUCHIL—*Cordia alliodora* (R. & P.) Chem.

A greenish, grey wood from Tropical America, resembling Ash in grain, but heavier, harder, stronger and more durable with long tough fibres. It is durable in contact with soil and resistant to abrasion, and is used for the same purposes as Ash and Hickory. Available in lumber or veneers.

THINGAN—See Yakal.

THITKA—*Pentace Burmanica,* Kruz.

Also known as Burma Mahogany. This wood, from Burma, is of a light brownish-yellow color, similar to Cuban Mahogany when first cut and seasons to a natural reddish-brown color. The grain is typically interlocked producing a narrow regular stripe or roe figure when quartered. Occasional logs show a beautiful broken roe and mottle. It is used for furniture and decorative paneling.

THORNAPPLE—See Hawthorne.

THUYA BURL—*Tetraclinis articulata,* Masters.

Also known as Thyine wood or Citron burl, this wood is found only in the Atlas Mountains, Algeria. Its color varies from light brown to nearly black, almost charred in appearance, with tiny eyes similar to the figure in Birdseye Maple. Flitch cost 1/28″ half round varies from 10c to 40c.

TIAMA—See Aboudikrou.

TIAONG—See Tanguile.

TIGERWOOD—*Lovoa klaineana.* Pierre.

This wood from West Africa is known by many trade names, the commonly used ones being Lovea, Congowood, Alona, Dibetou, Wibolo, Apopo, Sida and Benin. The British principal trade names are Nigerian Golden Walnut, Benin Walnut, or African Walnut, although the wood is not a Walnut, but is related to the African Mahoganies. Limited quantities of lumber, 4/4 to 8/4, are available. The wood varies greatly in character and color from a dull greyish-brown Walnut with black streaks to a bright Satinwood gold. The ribbon stripes are pronounced as in a tiger's coat of fur, and the veneer is particularly effective when quarter sliced and V or diamond matched. Flitch cost 1/28″ quarter sliced ranges from 2c to 6c.

TILLEUL—French for Linden.

TINDALO—See Oro.

TOLA—Correct name is Agba.

TONQUIN—*Chloroxylon swietenia,* D.C.

From southern India and Ceylon. The highly ornamental grades are sold as Ceylon Satinwood and the plainer cuts as Tonquin. See Ceylon Satinwood for description. It is sometimes called Tonquine Wood.

TRINCOMALI WOOD—*Berrya ammonilla,* Roxb.

Also called Halmililla. The tree grows in India, Burma, Ceylon and the Malay States and produces a wood that is a deep dark red color similar to Beefwood. It has a coarse, sticky, hard grain and an oily feeling, and is a valuable wood where hardness, toughness, elasticity and durability are required.

TSSOUA—See Tala.

TULIP TREE—See Yellow Poplar.

TULIPWOOD—*Dalbergia spp.*

Also called Brazilian Pinkwood or by the French Bois de Rose (wood of the rose). It grows in northeastern Brazil, the logs being shipped from the port of Bahia. The wood is very light in color and streaked with dark red and yellow in tulip shades. Flitch cost 1/24″ sawn from 15c to 25c.

TUPELO—See Gum, Tupelo.

UBULU—See Opepe.

UHU—See Benin Ebony.

UJUSTI—See Capomo.

VENCOLA—*Platymiscium polystachyum*, Bth.

From Central and northern South America. This wood is generally marketed as Macawood or Quira and is described under Macawood.

VERA—See Lignum Vitae.

VERA-WOOD—*Bulnesia arborea*, Engl.

This South American wood has been used as a substitute for Lignum Vitae under a variety of names; Maracaibo-wood, Congo Cypress, Vera Amarillo, Guayacan, etc. It is similar to Lignum Vitae but is not considered suitable for propeller-shaft bushings.

VERDA—See Indian Silver Greywood.

VERMELHA—See Arariba.

VERMILLION—See Padauk.

VINDOU—See Evino.

VINHATICO—*Pithecolobium vinhatico*, Record.
Enterolobium ellipticum, Benth.

Authorities do not agree on the classification of this wood from Brazil. It is variously known as Orelha de Macaco, Vinhatico de boi, Mihatico Amarello and is a bright orange-colored wood with a silky lustre and smooth grain. Some species are called Amarello Vinhatica and are a warm nut-brown color, with a straight, firm, hard grain and fine texture.

VIOLETWOOD—See Kingwood and Amaranth.

VIROLA—*Virola merendonis*, Pittier.

Common names are Banak and Mahban. It is from British Honduras, Guatemala and Panama and is reddish brown and often has a purplish hue. It has proven satisfactory for veneer and lumber and finishes well.

WAIKA CHEWSTICK—See Boarwood.

WALILE—See Akomu.

WALLABA—*Eperua, falcata*, Aubl.

British Guiana. The heartwood is a red-brown color with dark streaks and hard, close grain. It has an oily gum surface and is used for telephone poles. The sapwood is dingy white and the wood is heavy, hard, with a medium to coarse texture.

WALNUT, AFRICAN—See Tigerwood.

WALNUT, AMERICAN BLACK—*Juglans nigra*, Linn.

Black Walnut is found in commercial quantities chiefly in Missouri, Iowa, Illinois, Indiana, Ohio, Kentucky, and Tennessee, although it grows to some extent from New England to Texas. Walnut is of two general types—that from forest grown trees and that from trees grown in the open. The wood from trees grown in the open is much lighter colored, growing as much in one year as the wood of the forest trees does in two years, and its wide generally irregular rings cause most unusual patterns. The color, texture, and character are affected by soil and climatic conditions in different sections of the United States. The logs are generally cut into five general types of veneer: (1) plain sawn from 1/16″ to 1/4″ thick, (2) rotary from 1/28″ to 1/8″ thick, (3) half round rotary 1/28″ thick, (4) flat sliced from 1/100″ to 1/16″ thick, (5) quarter sliced from 1/28″ to 1/16″ thick. Walnut logs that give any indication of cross-figure (a mottled or wavy effect across the grain of the wood) are cut half-round rotary to produce what is commercially known as Figured Walnut. Veneers are secured from the trunk of the Walnut tree as in other trees, but in addition choice veneers are produced from the stump, crotch and burls.

WALNUT, ANCONA—A term applied to Persian Walnut to indicate dark, streaky figured wood whether produced from French, Italian, Spanish or Circassian sources.

WALNUT, AUSTRALIAN—See Orientalwood.

WALNUT, AUSTRIAN—See Persian Walnut.

WALNUT, BENIN—See Tigerwood.

WALNUT, BRAZILIAN—See Imbuya.

WALNUT, CALIFORNIA—*Juglans hindsii* (Jepson), Rehder.—*Juglans californica*, Watson.

Also called Claro Walnut. A native of California, this wood grows very rapidly, and when quarter sliced presents a startling effect since the growth lines are very wavy. Its color is a tannish-brown mixture with prominent black and light stripes and decorative black spots. This species produces stumpwood, crotch-wood and burls.

WALNUT, CIRCASSIAN—See Persian Walnut.

WALNUT, CLARO—See California Walnut.

WALNUT, EAST INDIA—See East Indian Laurel and Koko.

WALNUT, ENGLISH—See Persian Walnut.

WALNUT, FRENCH—See Persian Walnut.

WALNUT, INDIA—See Indian Silver Greywood.

WALNUT, ITALIAN—See Persian Walnut.

WALNUT, MOIRE—Walnut with an artificial curly figure produced from plain Walnut by cutting the veneer with a knife having a scalloped or wavy edge.

WALNUT, NIGERIAN GOLDEN—See Tigerwood.

WALNUT, ORIENTAL—See Orientalwood.

WALNUT, PERSIAN—*Juglans regia*, Linn.

Persian Walnut is the wood of European-Asiatic trees, all of the same botanical species although different in texture and general character due to the influence of soil and climate. It is sometimes referred to as European or Royal Walnut.

CIRCASSIAN WALNUT.

Also known as Caucasian Walnut. This wood, principally from Russia and Asia Minor, is a tawny-colored Walnut with variegated streaks of black or dark brown, the value of the veneer depending upon the amount of desirable black pigment that it contains. Flitch costs 1/28" sliced vary from 5c to 8c in plain figure and highly figured from 12c to 30c, stumpwood from 5c to 20c, crotchwood in plain figure from 5c to 10c with highly figured from 20c to 30c, and burls from 5c to 25c. Solid lumber is available from 4/4 to 10/4.

FRENCH WALNUT.

This wood is soft and a quiet grey in color with a fine, smooth grain marked by less prominent growth lines than American Walnut. The sapwood tones into the heartwood gradually without a definite color change. The burls are especially beautiful with their black markings which produce most unusual effects when properly matched. Solid lumber is available from 4/4 to 16/4.

OTHER EUROPEAN WALNUTS.

Persian Walnut is grown in many countries and marketed as English, Italian, Turkish, Bulgarian, Spanish, Austrian, and Russian Walnut, according to locale.

WALNUT, QUEENSLAND—See Orientalwood.

WALNUT, RUSSIAN—See Persian Walnut.

WALNUT, SATIN—See Red Gum.

WALNUT, SOUTH AMERICAN—See Kelobra.

WALNUT, TURKISH—See Persian Walnut.

WALNUT, WHITE—See Butternut.

WARRI—See Australian Maple.

WAWA—See Ayous.

WEBANGO—See Erimado.

WHITEWOOD, AFRICAN—See Ayous.

WHITEWOOD, AMERICAN—See Yellow Poplar.

WILLOW, BLACK—*Salix nigra*, Marsh.

Also called Southern Willow, and has been sold as "Swamp Walnut." This tree grows extensively from southern Illinois south along the entire length of the Mississippi River. It is somewhat lighter in color than American Walnut, and is usually finished in Walnut or Mahogany stains and sometimes bleached in the new treatments.

WISHMORE—See Niangon.

WISMORE—See Niangon.

YAKAL—*Shorea and Hopea spp.*

Several species from the Philippine Islands are marketed as Yakal and similar species from India, Burma and Borneo are sold as Thingan. The Philppine wood is a light yellow-brown color, with a firm, hard texture and close grain and is durable under all conditions. The grain is sharply crossed and shows a marked ribbon when quartered. The India and Burma Thingan is milder, lighter in weight, softer in texture and less interwoven in grain.

YAMANE—See Gumhar.

YANG—*Dipterocarpus, spp.*

From Siam. The wood is very similar to Eng and Gurjun, and is probably the same wood as Maiyang.

YAYA—See Lancewood.

YELLOWWOOD, AFRICAN—*Podocarpus spp.*

Also called Geelhout, African Pine, Natal Yellowwood and Upright Yellowwood. This wood from Africa is a dirty yellowish-straw color with streaks of darker brown. This is probably the same wood as Podo.

YEW, AMERICAN—*Taxus spp.*

Also called Florida, Pacific or Western Yew. The tree grows in the U. S. A. and southwestern Canada and produces a reddish-brown wood that is used for bows in archery.

YEW, EUROPEAN—*Taxus baccata,* Linn.

From Europe and Asia. The sapwood is almost white, and the heartwood when freshly cut may vary from a bright tan to red-brown or purple but becomes a more uniformly warm brown color upon exposure. The grain is rarely straight due to its irregular growth and is a beautiful wood of fine texture. Burls are rare, but when sound are converted into beautiful veneers rivalling in beauty Thuya and Amboyna Burl.

YINMA—See Chickrassy.

YOMA WOOD—See Padauk.

YUBA—*Eucalyptus obliqua,* L'Herit.

Also called Tasmanian Oak. A fancy wood that has color, quality and figure. The background varies from light tan to golden brown, straight grained, with a ripple cross-fire. Flitches can be secured in blistered figure or in fiddled figure, the cost of 1/28" ranging in plain or medium figure from 3c to 10c, and highly figured from 12c to 20c. 4/4 lumber is available.

ZAPATERO—See West Indian Boxwood.

ZAPOTA—*Achras zapota,* L.

This is the chewing-gum or Chicle tree of British Honduras, Central America and Southern Mexico. It has a variety of names; Sapodilla, Naseberry, Chico Zapote, Zapotillo and other native names. The tree is important for the gum it exudes, which is made into chewing gum. The wood is a beautiful deep rich red or plum color with a hard, close grain. Occasionally veneers are sawn on the quarter producing a fine ripple surface, suitable for decorative woodwork. In Mexico it is considered impervious to decay and rot and is used for dock piles. Available in lumber or sawn veneers.

ZAPOTE, MAMEY—*Calocarpum mammosum,* Pierre.

This wood from Central and South America is known by many names, Sapote, Marmalade tree and Mamee Apple by the natives on account of the fruit. It is a light grey-colored wood, with a very hard surface, and reported to be between Walnut and Hornbeam in density. Supplies are limited.

ZEBRAWOOD—*Brachystegia spp.*

This wood also called Zebrano, or Zingana, is shipped from the provinces of Cameroon and Gaboon in West Africa. When quartered the light straw-colored background and parallel dark brown stripes resemble the beautiful coat of a zebra. The logs from Cameroon and Gaboon are very similar types, with the stripes of the Cameroon generally very thin and wavy, while the Gaboon stripes are much wider and often so straight they appear to have been ruled. Flitch costs vary from 3c to 10c. Solid lumber 4/4 to 6/4 can be secured.

ZELKOWA—*Zelkowa spp.*

Also spelled Zelkva or Zelkova. From Russia, Persia, China and Japan, several species. The wood is yellowish-white, with a tough, hard grain much like American Elm but not so close grained or long in the fibre.

ZINGANA—See Zebrawood.

ZIRICOTE—See Caneletta.

Description of Veneer Terms

Veneers are generally cut from the trunk of the tree, but some species produce choice and unusual figures from other portions of the growth. Commercially these are grouped as follows:

LONGWOOD

Longwood, or trunkwood, is cut from the trunk and may be rotary cut, half-round rotary, back-cut rotary, flat or quarter sliced or sawn.

STUMPWOOD

Stumpwood, or butt, is produced from the stump of the tree. The figure is produced by the wood fibres which, compressed in growth, tend to wrinkle as they twist and fold over each other at the point where the roots join the trunk. It is generally half-round rotary cut.

CROTCHWOOD

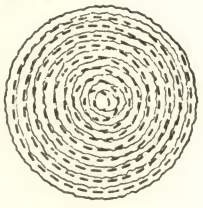
Crotchwood is secured from the portion of a tree just below the point where it forks into two limbs. Here the grain is crushed and twisted, creating a great variety of plume and flame figures, often resembling a well formed feather. Crotches are sliced parallel to the trunk line, and the outside of the block produces a swirl figure that changes to full crotch figure as the cutting approaches the center of the block. It is interesting to note that crotches are used upside down to the way they grow.

BURL

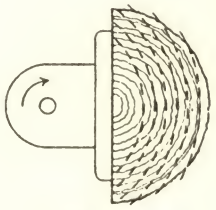
Burls come from a warty growth generally caused by some injury to the growing layer just under the bark. This injury, perhaps due to insects or bacteria, causes the growing cells to divide abnormally, creating excess wood, that finds room for itself in many little humps. Succeeding growth follows these contours. Cutting across these humps by the half-round method brings them out as little swirl knots or eyes.

Veneer logs are cut by one of three general methods which produce either rotary cut, sliced or sawn veneers:

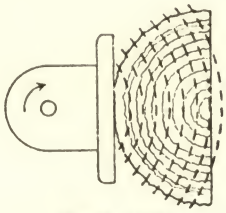
ROTARY CUT



Rotary Cut



Half Round



Back Cut

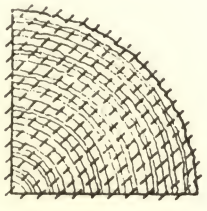
The log is steamed in a large vat to soften the wood, the bark is removed, and the whole log is mounted in a large lathe and turned against a razor-edged knife. As the log revolves the veneer is peeled off in long sheets. The log is mounted on center when rotary cut, and is mounted off center when half-round or back-cut. The cut is slightly across the annular rings when cut half-round or back-cut. Rotary veneers are generally cut from 1/28″ to 1/8″ thick.

SLICED



Plain Sliced

Slicing is done by a veneer slicer after the half or quarter log has been steamed. The slicer has a stationary knife, about sixteen feet long, and the log is mounted on a frame parallel to the knife which moves down at an angle against the knife with a draw-shave motion. Flat sliced veneer is cut from the half log, mounted with the heart side flat against the guide plate, and the slicing is done parallel to a line thru the center of the log. Quarter sliced veneer is cut from the quarter log mounted on the guide plate so the growth rings of the log strike the knife at or near right angles, producing a series of straight stripes. Sliced veneers are generally cut 1/28″ thick, but can be cut from 1/100″ to 1/16″ and in a few woods as thick as 1/8.″

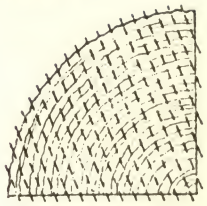


Quarter Sliced

Quarter slicing is also quite commonly done on rotary lathes by chucking the quarter-log off center as described above for half-round cutting and back cutting.

Description of Veneer Terms (Continued)

SAWN



Rift Sliced or Sawn

Sawn veneer is cut without steaming the logs, and is produced on special veneer saws where the log moves against a circular saw or a band saw. This form of cutting is used for thicker veneers ranging from 1/20″ to 1/4″, above which wood is no longer classed as veneer but as lumber. Veneer may be plain sawn or quarter sawn as described above under sliced. Oak produces a figure called rift, needle-point or combgrain which is in realty Quartered Oak where the saw or knife cuts across the rays at an angle, producing pencil-like stripes with no large, quartered flakes. This is sometimes called a "bastard cut." Because of the great amount of waste involved and the consequent high cost, very little veneer is now produced by sawing.

FLAT CUT

Plain sliced or plain sawn veneers are sometimes referred to as flat cut.

Figure in veneers is produced by growth rings, flakes or rays, irregular grain pigments, or a combination of two or more of these factors. Typical examples:

Growth rings—flat cut Oak.
Rays—quartered Oak or Sycamore.
Irregular grain—crotch or stripe Mahogany.
Pigment—Zebrawood and Macassar Ebony.

In temperate zone trees the combination most frequent is figure due to growth rings and irregular grain. Tropical trees often combine pigment with irregular grain.

PLAIN STRIPE

Alternating lighter and darker stripes, running more or less the length of a flitch and varying in width. It is produced by cutting on the quarter a log that shows growth rings.

RIBBON STRIPE

In some woods, principally Mahogany, wide, unbroken stripes can be secured. It is produced by cutting on the quarter, a log from a tropical tree with interwoven grain.

BROKEN STRIPE

Broken stripe is a modification of ribbon stripe, the markings tapering out and producing a broken ribbon. If the log described in ribbon stripe also has a twist in the grain the stripes are short or broken.

ROPE

If the twist in the grain of broken stripe is all in one direction a rope figure results.

MOTTLE

A variegated pattern which consists principally of irrregular, wavy fibres extending for short distances across the face. If to a twisted, interwoven grain there is also some irregular cross figure, the broken stripe figure becomes a mottle. If the cross figure is spaced apart about the width of the stripe the figure becomes a block mottle. If the stripes are very narrow the figure is called a bees-wing mottle, frequently found in Satinwood.

FIDDLE-BACK

A fine, strong, even, ripple figure as frequently seen on the backs of violins. It is found principally in Mahogany and Maple, but occurs sometimes in other woods.

RAINDROP

When the waves in the fibres occur singly or in groups with considerable intervals between, the figure is called raindrop as it looks like streaks made by drops striking a window pane at a slant.

FINGER ROLL

A wavy pattern in which the waves are about the size of a finger.

CROSS-FIRE

Figures which extend across the grain as mottle, fiddle-back, raindrop and finger-roll are often called cross figure or cross-fire. A pronounced cross-fire adds greatly to the beauty of the veneer.

Description of Veneer Terms (Continued)

CHAIN

A succession of short cross markings of uniform character remotely suggesting cross links of a chain.

CURLY

Curly figure is found mostly in Maple or Birch, and is due to the fibres being distorted and producing a wavy or curly effect in the veneer.

BLISTER

This figure is produced by an uneven contour of the annual rings, and not to blisters or pockets in the wood. The veneer has the effect of being blistered. Must be cut rotary or half-round.

BIRD'S-EYE

Bird's-eye is due to local sharp depressions in the annual rings, accompanied by considerable fibre distortions. Once the depressions are formed succeeding growth rings follow the same contour for many years. Rotary veneer cuts the depressions crosswise, and shows a series of circlets called bird's eyes. It occurs in only a small percentage of Maple trees.

FEATHER

See Crotchwood.

Expert matching of veneers is required to retain the natural beauty of the wood, and to produce beautiful or unusual effects. A description follows of the more generally used terms.

FLITCH

(a) A hewn or sawed log or a section of a log made ready for cutting into veneers.
(b) The above after cutting a complete bundle of thin sheets, laid together in sequence as they were sliced or sawn.

BOOK MATCHED

Adjacent sheets from a flitch are opened like a book with the figure on the back of the upper sheet being matched to the figure on the face of the next sheet. The fibres of the wood, slanting in opposite directions in the two sheets, create a characteristic light and dark effect when the surface is seen from an angle.

END MATCHED

Often called butt matched. The veneers are matched as described for book matched, but the ends of the sheets are matched. Very often veneers are both book and end matched, and this is called a four-way match.

SLIDE OR SLIP MATCHED

The top sheet of veneer is slid into position with the sheet beneath it, with the face of both sheets matched together, instead of the back of one sheet and the face of another sheet as in book matching. Slide matching is common in quartered striped wood.

CENTER MATCHED

An even number of pieces of equal size are matched, with the joint coming in the center of the panel.

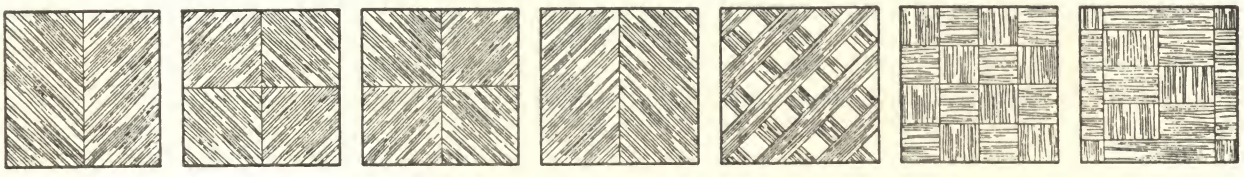
BALANCE MATCHED

More than two pieces, although of equal size, are used in a single face.

RANDOM MATCHED

A combination of unequal sized pieces in a single face.

SPECIAL MATCHING



"V" Match Herringbone | Diamond Match | Reversed Diamond | Inverted "V" Match | Basket Weave | Block Design | Marginal Block

Properties of U. S. Woods

Authority—"Wood Handbook" and "Standard Terms for Describing Wood", United States Department of Agriculture, Forest Products Laboratory

	Weight (1)	Shrinkage (2)	Strength (3)	Stiffness (4)	Hardness (5)
Hardwoods					
Ash, Black	2,830	5.8%	Mod. Weak	Mod. Stiff	Mod. Hard
Ash, White (Avg.)	3,420	5.6%	Strong	Stiff	Hard
Basswood	2,170	7.0%	Weak	Mod. Stiff	Soft
Beech	3,750	8.2%	Mod. Strong	Stiff	Hard
Birch (Avg.)	3,670	6.7%	Strong	Stiff	Hard
Butternut	2,250	4.6%	Weak	Mod. Limber	Mod. Soft
Cherry, Black	2,930	5.3%	Mod. Strong	Stiff	Mod. Hard
Chestnut	2,500	5.0%	Weak	Mod. Limber	Mod. Hard
Cottonwood, Eastern	2,330	6.9%	Weak	Mod. Limber	Mod. Soft
Elm, American	2,920	7.1%	Mod. Weak	Mod. Stiff	Mod. Hard
Elm, Rock	3,670	6.1%	Strong	Mod. Stiff	Hard
Elm, Slippery	3,080	6.7%	Mod. Strong	Mod. Stiff	Mod. Hard
Gum, Red	2,830	7.4%	Mod. Weak	Mod. Stiff	Mod. Hard
Gum, Tupelo	2,920	5.7%	Mod. Strong	Mod. Stiff	Hard
Hackberry	3,080	6.7%	Mod. Weak	Mod. Limber	Mod. Hard
Hickories, Pecan	3,750	6.7%	Strong	Stiff	Very Hard
Hickories, True	4,250	8.6%	Very Strong	Very Stiff	Very Hard
Locust, Black	4,000	5.2%	Exc. Strong	Exc. Stiff	Very Hard
Magnolia, Evergreen	2,920	5.0%	Mod. Weak	Mod. Stiff	Hard
Maple, Silver	2,750	5.4%	Weak	Limber	Mod. Hard
Maple, Sugar	3,670	7.1%	Strong	Stiff	Hard
Oak, Red (Avg.)	3,670	6.8%	Mod. Strong	Stiff	Hard
Oak, White (Avg.)	3,920	7.0%	Mod. Strong	Mod. Stiff	Hard
Poplar, Yellow	2,330	5.3%	Weak	Mod. Stiff	Mod. Soft
Sycamore	2,830	5.7%	Mod. Weak	Mod. Stiff	Mod. Hard
Walnut, Black	3,170	5.3%	Strong	Stiff	Hard
Willow, Black	2,400		Exc. Weak	Exc. Limber	Mod. Soft
Softwoods					
Cedar, Port Orford	2,420	5.2%	Mod. Strong	Stiff	Mod. Soft
Cedar, Western Red	1,920	3.8%	Weak	Mod. Limber	Mod. Soft
Cedar, North, White	1,830	3.5%	Very Weak	Very Limber	Soft
Cypress	2,670	4.6%	Mod. Strong	Mod. Stiff	Mod. Hard
Fir, Douglas	2,830	5.8%	Mod. Strong	Very Stiff	Mod. Hard
Fir, White (Avg.)	2,250	5.3%	Mod. Weak	Mod. Stiff	Mod. Soft
Hemlock, Eastern	2,330	5.1%	Mod. Weak	Mod. Limber	Mod. Hard
Hemlock, Western	2,420	5.9%	Mod. Weak	Mod. Stiff	Mod. Hard
Larch, Western	3,000	6.1%	Mod. Strong	Stiff	Mod. Hard
Pine, Longleaf	3,420	5.6%	Strong	Very Stiff	Hard
Pine, North, White	2,080	4.5%	Weak	Mod. Limber	Mod. Soft
Pine, Ponderosa	2,330	4.7%	Weak	Mod. Limber	Mod. Soft
Pine, Shortleaf	3,000	5.8%	Strong	Stiff	Mod. Hard
Pine, Sugar	2,080	4.2%	Weak	Mod. Limber	Mod. Soft
Redwood	2,330	3.3%	Mod. Strong	Mod. Stiff	Mod. Hard
Spruces (Avg.)	2,330	5.8%	Mod. Weak	Mod. Stiff	Mod. Soft

Abbreviations: Exc.—Exceedingly; Mod.—Moderately

(1) Per 1,000 board feet at 12% moisture content (air dried).

(2) Tangential shrinkage from green to 6 or 7% moisture (kiln dried).

(3) Combined bending and compressive strength.

(5) Load required to embed a 0.444 inch ball to one-half its diameter.

